2025
STATE PLANNING AND RESEARCH PROGRAM I

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Office of Transportation Planning

David Mohler, Executive Director	**Steve Woelfel**, Deputy Executive Director	**Bob Frey**, Director of Project-Oriented Planning	**Ethan Britland**, Manager of Multimodal Planning	Peter Sutton
				Makaela Niles
				Patrick Snyder
				Rachel Kelly
			Lionel Lucien, Manager of Public Private Development	William Simon
				TPP III (to be filled)
		Kevin Lopes, Director of Geospatial Technology		David Dinocco
				Janine Hynds
				Michael McGill
				Jose Simo
				Argenis Sosa
				Timothy Morrissey
				Sudip Paudel
				Lin Han
				Shruti Venkatesh
				Patrick McCafferty
				Florence Person
				Carl Hughes
				Charlotte Mays
				David Henriques
				Nikhitha Yelukati
				Charles Major
		Derek Krevat, Manager of MPO Activities		Derek Shooster
				Christopher Klem
				Miranda Briseno
				Raissah A. Kouame
		Jules Williams, Manager of Sustainable Transportation		Max Natanagara
				Daisy Brown
		Hao Yin, Manager of Research		Nicholas Zavolas
				Patrick McMahon
				Michael Flanary
				Anil Gurcan
				Austin Sanders
		Jonathan Church, Manager of Transit Planning		Patricia Cahill
				Arnav Chatterjee
				Caleb Plummer
				TPP III (to be filled)
		Liz Williams, Director of Data and Policy		Marthinus J. "MJ" Riekert
				TPP II (to be filled)
		Michelle Scott, Manager of Capital Planning		Andrew Wang
				Stephanie Abundo
		Nathaniel Kerr, Manager of Administration		TPP II (to be filled)
				TPP II (to be filled)
		Susan Reppucci		

Highway Division

Jonathan Gulliver, *Highway Administrator*	**Carrie Lavallee**, *Deputy Administrator and Chief Engineer*	**Jack Moran**, *Deputy Chief Engineer for Performance and Asset Management*	**Ed Naras**, *Pavement Management Engineer*	Jonathan Smith
				Cody Holerno
				William Guttierrez
				Stefan Kargakis
				Steven Morin
				Liz Cruz-Falero
				Subash Shahi
				James Pierce
		John Bechard, *Deputy Chief Engineer for Project Delivery*	**John Anthony**, *Survey Engineer*	Arben Zhuri
				Brian Knowles
				Evanson Browne
				Jeff Bruce
				John Anthony
				John Barnes
				Leo Scanlon
				Michael Chouinard *(reports to John DeLeire)*
				Michael Roberts *(reports to Michael Chouinard)*
				Eugene Tivnan
				Mehdi Sadjady
	Neil Boudreau, *Assistant Administrator for Traffic and Safety*		**John Amato**, *Interim Manager of Advanced Transportation Technology*	Robert Belcastro
				Tracy DeYoung
				Brian Farrington
				James Groomes
				Juan Nunez
				Hector Monet
				Michael Ribeiro
				Wayne Schofield Jr.
				Misrak Sultan
				Lori Suss
				Ian Adams
				Corey O'Connor
				Spencer Cullen
				Zachary Medeiros
				Amy Getchell
				Michelle Boucher
				Danile Moy
			Bonnie Polin, *State Safety Engineer*	Darryl Valovcin
				TPP II TBH
				Robert Moon
				Dakota DelSignore
				Michelle Deng
				Ana Fill
				Kevin Fitzgerald
				Jennifer Inzana
				Kirsten Johnson
				Bonnie Polin
				Stacey Schwartz
				James Terlizzi
				Kylie Braunius
				Evelyn Densmore
				Shaojie Qiu
				Civil Engineer III TBH
				Civil Engineer I TBH
				intern 2 co-op 2
				Intern-1 co-op-1
				intern 3 co-op 3
				Student Intern
				Student Intern

SPR I Part A

Administration

A.1 / Administration and SPR Coordination

Task Lead: Nathaniel Kerr

Task Purpose:

To supervise and direct planning and research staff and projects to maximize State Planning and Research (SPR) funding. The administrative staff includes the Executive Director, Deputy Executive Director, Director of Project-Oriented Planning, Director of Data and Policy, Director of Geospatial Technology, Manager of Administration, and administrative support staff. The administrative staff oversees all fiscal and administrative activities of the following units:

- Capital Planning
- GIS Services
- MPO Activities
- Multimodal Planning
- Public-Private Development
- Research
- Sustainable Transportation
- Transit Planning
- Guidance is also provided to the following units of the MassDOT Highway Division that are authorized for SPR reimbursement: Pavement Management, Statewide Traffic Data Collection, Traffic Crash Records and Safety Management, and Survey.

Accomplishments in prior year:

Maintained standard operating procedures (SOP) for billing, project closeouts and new project/contract awards and funding to ensure proper billing and consistency with project and contract awards/closeouts. Built out new invoice tracking system to better manage and track vendor payments.

Proposed activities for next year:

SPR I and II administration, including required reporting, amendments, and scope approvals by FHWA. Submit SPR I and II deliverables to FHWA. Continue onboarding several OTP staff to fill vacancies. Internal working group to continue coordination with FHWA on billing, project closeouts and new contracts/awards consistent with SOP.

Anticipated products:

All activities, tasks, and deliverables identified for completion within FFY 2025.

Finalization of project closeout documentation and Standard Operating Procedure(s) addressing billing and contract closeouts and new contract/project awards.

Estimated task completion: 09-30-2025

Estimated staff salaries and benefits: **$781,704.10**

Estimated Other Costs: **$264,000.00**

MassDOT staff members	% Time to task
Nathaniel Kerr	100.0
David Mohler	100.0
Susan Reppucci	100.0
Stephen Woelfel	100.0
Contracted Student Intern	100.0
Business Management Specialist (TBH)	100.0
TPP II TBH	100.0
Kevin Lopes	50.0
Liz Williams	50.0
Bob Frey	50.0
Staff Inflator FFY25	None

Estimated task budget: $1,045,704.10

$264,000.00

1. American Association of State Highway and Transportation Officials (AASHTO) Annual Membership: $48,000.00 2. Miscellaneous administrative expenses (incl. $650 for Online trainings for Sustainable Transportation team): $10,000.00 3. Northeast Association of State Transportation Officials (NASTO): $2,000.00 4. Newspaper ads for public meetings/announcements: $8,000.00 5. The Eastern Transportation Coalition: $92,000.00 6. Translation Services: $15,000 7. Travel: $26,000.00 8. AASHTO Census Transportation Solutions TSP (100% Federal): $63,000.00

Capital Planning

A.2 / Capital Planning Development and Coordination

Task Lead: Michelle Scott

Task Purpose:

This task is necessary for the development and process improvements of the annual Capital Investment Plan (CIP) for MassDOT and the state-funded portion of the MBTA CIP. Work under this task will involve the production of the state fiscal year (SFY) 2026–2030 CIP, a fiscally constrained document that will include MassDOT's capital investments across all Divisions as well as investments for MassDOT's Enterprise Services. In building this plan, staff will work with each MassDOT Division to identify and prioritize projects for funding over this five-year period. Additionally, staff will gather public input following the procedures established in MassDOT's Public Participation Plan. Staff will ensure that the CIP development process is aligned with the development of the STIP and with the priorities, actions, and recommendations of Beyond Mobility, MassDOT's statewide long-range transportation plan. The SFY 2026–2030 CIP will account for trends and changing demands on our transportation system and the vision of how our transportation system should evolve to meet the needs of our customers and the changing demographics of the Commonwealth. With input and guidance from the Secretary, Administrators, and the Divisions, staff will revisit goals, strategic objectives, and priorities for the next five years in developing a new capital plan for MassDOT. The 2026–2030 CIP will continue to incorporate process improvements for the planning cycle, such as:

- Enhancements to tools used to track project information and costs.
- Improvements to the public engagement process, including increased focus on engaging traditionally underrepresented groups
- Incorporation of objectives from updated asset management and strategic plans (such as the Commonwealth’s Transportation Asset Management Plan, Bicycle and Pedestrian Plans, and the Freight Plan, among others).
- Improvements to the CIP equity analysis. This task also covers staff presentations to and engagement with the MassDOT Board of Directors and its committees. In addition, it covers coordination with MassDOT’s Capital Budget team, the Commonwealth’s Executive Office for Administration and Finance, and other internal and external stakeholders for CIP-related activities over the course of the year. As part of this task, staff may request consultant support through task A.16 “On Call Contracts” for producing and maintaining the CIP Universe of Projects and producing CIP documents, among other activities.

Accomplishments in prior year:

- Developed and published the SFY 2025–2029 Capital Investment Plan. Provided web-based CIP comment tool and resources to gather public input and worked with staff from metropolitan planning organizations to host virtual public meetings about the draft CIP.

- Utilized on-call consultant support from Cambridge Systematics (CS) under SPR Task A.16, "On Call Contracts," to develop, maintain, and enhance the CIP universe of projects and other associated tasks. Made presentations to the MassDOT Board of Directors, its committees, external stakeholders, and the public.
- Responded to CIP-related information requests from MassDOT and external stakeholders.
- Continued to refine the Web-based CIP ESRI StoryMap and used PowerBI to create interactive data visualizations displaying CIP funding sources and spending.
- Incorporated Regional Environmental Justice Plus (REJ+) data to capture an expanded set of equity populations in the CIP equity analysis.
- Developed reports for tracking federal competitive grant opportunities for transportation and supported MassDOT coordination related to applications for funds.
- Continued to implement improvements to streamline the CIP development process and maintained or updated related documentation.

Proposed activities for next year:

- Coordinate the development of the SFY 2026-2030 Capital Investment Plan.
- Make presentations to the MassDOT Board of Directors, its committees, external stakeholders, and the public.
- Respond to CIP-related information requests.
- Continue to implement improvements to streamline and enhance the CIP development process, such as improvements to the equity analysis.
- Support other capital planning-related initiatives, as needed.

Anticipated products:

- SFY2026-2030 Capital Investment Plan
- Responses to requests for information from within MassDOT and from external stakeholders
- Presentations to the MassDOT Board of Directors, its committees, external stakeholders, and the public
- Updates to CIP documentation
- Updates to CIP-related Web content

Estimated task completion: 09-30-2025

Estimated staff salaries and benefits: **$253,312.51**

MassDOT staff members	% Time to task
Andrew Wang	100.0
Michelle Scott	100.0

Stephanie Abundo	100.0
Staff Inflator FFY25	None

Estimated task budget: $253,312.51

Geospatial Technology

A.3 / GIS Coordination

Task Lead: Kevin Lopes

Task Purpose:

To work closely with each MassDOT Division; other state agencies, including MassGIS; municipalities; and regional agencies, including Metropolitan Planning Organizations (MPOs), to continually improve the delivery of GIS data and applications for all customers of the Commonwealth, ensuring better information and project delivery through a variety of systems and technologies. Work under this task will also involve participating in and contributing to the specialized coordination required to integrate OTP's GIS tools and platforms into agency-wide asset management inventories and processes. We will also represent MassDOT at various state, regional and national GIS user groups.

Accomplishments in prior year:

Continued ongoing GIS coordination through a variety of correspondence and meetings.

- Completed working with Massachusetts Bay Transit Authority (MBTA) on building out the elevator cleaning application and bringing new assets into the tool.
- Completed working with the Rail & Transit Division on connecting with the Grants Plus database.?
- Continued working with the MBTA and the Rail & Transit Division to incorporate their projects into the MaPIT
- Completed rebuilding the Engage tool for a more intuitive and informative application, related to outreach and environmental justice obligations.

Proposed activities for next year:

All coordination activities performed in FFY 2024 are intended to continue throughout FFY 2025. The level of coordination needed will vary throughout the year, based on particular issues or efforts to support all GIS tasks and projects.

- Continue working with the Highway Division on their VueWorks GIS integration
- Continue working with the Highway Division on replacing the Outdoor Advertising database
- Continue to work with the Rail & Transit Division on connecting with the Grants Plus database.
- Begin Working with MBTA and the Rail & Transit Division to bring the Rail Inventory into a Linear Referencing System for track and asset management

Anticipated products:

- Various products may be initiated through coordination with MassDOT Divisions, the MBTA, and municipal and regional governments.

Estimated task completion: 09-30-2025

Estimated staff salaries and benefits: **$330,464.35**

MassDOT staff members	% Time to task
Jose Simo	100.0
Janine Hynds	100.0
Marthinus J. "MJ" Riekert	80.0
Kevin Lopes	50.0
Staff Inflator FFY25	None

Estimated task budget: $330,464.35

A.4 / GIS Platform Development

Task Lead: Kevin Lopes

Task Purpose:

To support the use of geographic information systems (GIS) for all MassDOT, MBTA, Metropolitan Planning Organization (MPO) and municipal staff. To ensure that there is continuous access to the GeoDOT platform; that users are able to work with all applications; and that GIS technology is kept current and operating efficiently with updated and reliable tools introduced throughout the year.

Accomplishments in prior year:

Provided a variety of support services to the MassDOT Divisions, the MBTA, and municipalities including providing relevant applications for various agency staff.

- Completed and Implemented the eSTIP viewer application
- Completed the Waze dashboard on the GeoDOT platform that was piloted in EDC6.
- Continued working on the TIP Scoring application for MPOs and hope to complete this in FFY24.
- Completed the new Project Viewer related to the Bond Bill with significant enhancements including funding information.
- Completed the redesign of the Engage suite of apps and will be moved into production.
- Designed and built an interactive year-end report dashboard to supplement the paper report.
- Supported the deployment of next generation MaPIT tool in Experience Builder.
- Continued providing training and support to various business units throughout MassDOT, MBTA and various municipalities.
- Completed asset database integrations with Highway systems for bridges and ancillary structures
- Assisted MassDOT business units on GIS technology projects supported by external vendors by providing resources, training, documentation, and hosting technologies

Proposed activities for next year:

- The MaPIT application will be deployed with new functionality on the Experience Builder platform
- Enhancement of eSTIP will continue this year to include a CIP Module
- Development of a TIP scoring tool for the MPOs will be completed.
- Update the Road and Bicycle Inventory Report applications.
- Conflation of the Road Inventory to the Regional Integrated Transportation Information System (RITIS) and other road networks will continue
- Development and maintenance of GeoDOT will continue.
- Using new platforms for enhanced data visualizations and analysis.
- Websites will be created and updated as necessary.

- New applications will continue to be developed throughout the year.
- Existing applications will be updated and improved
- Continue cloud hosting for our GIS platform.
- Support development activities for municipal assistance pilot program
- Provide support for oversized truck permitting platform
- Provide support for ITS management system
- Support research into use of Geo-AI for asset management and climate resiliency

Anticipated products:

Various applications, web sites and web maps are expected to be created. Some of these include:

- Truck permitting bridge reporting module
- MBTA Rapid Transit Speed Audit Tracking
- REJ+ and Accessibility Observatory dashboards
- Flood Risk viewer for remaining geographic Domains B, C, D

Estimated task completion: 09-30-2025

Estimated staff salaries and benefits: **$420,137.70**

Estimated Other Costs: **$0.00**

MassDOT staff members	% Time to task
Shruti Venkatesh	100.0
TPP III (TBH)	100.0
Carl Hughes	100.0
Patrick McCafferty	80.0
Argenis Cordones Sosa	50.0
Timothy Morrissey	50.0
Staff Inflator FFY25	None

Estimated task budget: $1,495,137.70

Estimated consultant costs: **$1,075,000.00**

Subtask / contract #	Total cost:	Pre-FFY 2025:	FFY 2025:	Post-FFY 2025:	Consultant/Contractor Name:	Consultant NTP:	Contract End Date:
eSTIP Enhancements and Supporting Applications / 110641	$2,258,323.00	$1,573,323.00	$475,000.00	$300,000.00	PMG Software	10-01-2022	09-30-2025
MaPIT Development / 110122	$4,436,134.00	$3,636,134.00	$500,000.00	$300,000.00	ESRI	10-01-2023	09-30-2025
Engage Development and Application Maintenance / 85243	$1,003,332.00	$903,332.00	$100,000.00	$0.00	CDM Smith	10-01-2022	09-30-2025

Other cost notes: $2,948,300 in other costs to be paid with NFA. Other costs include: $300 for Mentimeter annual subscription $2,000 for Google licensing $3,500 for annual Intersection Manager maintenance. $5,500 for annual GeoJobe maintenance. $10,000 for annual Tableau licensing and maintenance $12,000 for Plotter annual lease and maintenance $30,000 for annual TransCAD maintenance. $30,000 for annual Pictometry maintenance. $40,000 for Hardware/software purchases. $42,000 for annual VertiGIS maintenance $60,000 for Voyager Search maintenance. $95,000 for annual Wrike maintenance. $110,000 for Conveyal annual software licenses and support. $130,000 for NearMap annual licensing and maintenance. $135,000 for PMG Maintenance (STIP, SLD, eGIS) $143,000 for 1Spatial software and maintenance. $500,000 for annual ROK Technologies for AWS Cloud Hosting. $1,600,000 for annual ESRI Enterprise Agreement.

A.5 / GIS Services

Task Lead: Kevin Lopes

Task Purpose:

To provide maintenance and support of the GeoDOT Platform. Also, to provide a wide variety of standard and customized maps in support of MassDOT's operations for customers, maintain annual reports and catalogs, as well as provide post-production support and miscellaneous graphic design.

Accomplishments in prior year:

The GIS Services Team continued to maintain the platform and user accounts of the GeoDOT platform as well as provide a wide variety of standard and customized maps for many internal and external customers on an ongoing basis.

- GeoDOT user accounts were created and maintained
- Staff responded to over 500 map and data requests.
- Map and data catalogs were maintained and updated on schedule.
- Miscellaneous graphics support tasks performed frequently including the new GeoDOT Local Hub Site.

Proposed activities for next year:

- Continue to maintain and expand the GeoDOT platform including additional content, new Hub sites and additional named user accounts.
- All standard and recurring mapping and data provision activities performed in 2023 are intended to continue throughout 2024, as well as responding to specialized map and data requests as needed.
- Continue to improve the MassDOT map library and increase access to MassDOT data resources and improve provision of transportation information to a larger audience.
- Continue to build and maintain the Mass.gov website for all Planning sections and projects.

Anticipated products:

- GIS Maps.
- Map Catalog.
- Miscellaneous graphic products and reports.
- Mobility hub within GeoDOT for regional and micro-mobility resources

Estimated task completion: 09-30-2025

Estimated staff salaries and benefits: **$215,500.24**

MassDOT staff members	% Time to task
Michael McGill	100.0
Argenis Cordones Sosa	50.0
Timothy Morrissey	50.0
Patrick McCafferty	20.0
Staff Inflator FFY25	None

Estimated task budget: $215,500.24

A.6 / Highway Performance Monitoring System (HPMS)

Task Lead: Kevin Lopes

Task Purpose:

To update and maintain the Highway Performance Monitoring System (HPMS) data files in order to comply with Federal Highway Administration (FHWA) reporting requirements for the National Highway System (NHS) including Surface Transportation Block Grant Program (STBG) route mileage, system condition and performance, vehicle-miles of travel, highway functional classification, and administrative jurisdiction.

Accomplishments in prior year:

Submitted the Certified Public Road Mileage of 2023 to FHWA on May 22, 2024, with an updated letter from Governor Maura Healey authorizing the Secretary of Transportation to approve public roadway mileage.

- The 2023 Interstate submittal was uploaded to the FHWA web site on April 16, 2024.
- The 2023 HPMS full submittal was uploaded to the FHWA web site on June 17, 2024.

Proposed activities for next year:

All activities performed in FFY 2024 are intended to continue throughout FFY 2025, with any additional FHWA requirements added to the process as needed.

- Continue participating in the AEGIST Pooled Fund Study
- Intend to submit the Interstate HPMS submittal by April 15th.
- Intend to submit the complete HPMS submittal by June 15th.

Anticipated products:

2024 Certification of Public Road Mileage - June 1, 2025.

- 2024 HPMS Interstate Submittal - April 15, 2025.
- 2024 HPMS Full Submittal - June 15, 2025.

Estimated task completion: 09-30-2025

Estimated staff salaries and benefits: **$84,662.59**

MassDOT staff members	% Time to task
David DiNocco	50.0
Charlotte Mays	20.0
Nikhitha Yelukati	20.0

Staff Inflator FFY25	None

Estimated task budget: $84,662.59

A.7 / Inventory Data Management

Task Lead: Kevin Lopes

Task Purpose:

To provide MassDOT Divisions, the MBTA, other state agencies, municipalities and our public customers with comprehensive data and database management, as well as, to ensure that all users can access needed data efficiently. We will also provide data and spatial analysis where needed

Accomplishments in prior year:

Performed data management tasks and projects supporting MassDOT Divisions, including many spatial databases.

- Completed several analysis projects including the CIP Equity Analysis.
- Developed new data products including the Traffic Inventory and Pavement Inventory.
- Performed a major upgrade to the Roads and Highways database schema to allow the use of attribute rules.
- Added several new event layers to the Roads and Highways database including Interchanges and REJ+.
- We have created the Transportation Urban Boundaries from the 2020 census data and applied this to the Road

Inventory.

- Refined and improved the data provided in the Road Inventory.
- Improved scripting for managing the network including all overnight data management processes.
- Developed Asset data management scheme to better manage Highway asset data.
- Provided technical consulting for various MassDOT business units to help support data development.

Proposed activities for next year:

Data management tasks and projects performed in FFY 2024 are intended to continue throughout FFY 2025.

- Incorporate MIRE Data Elements into the data model including interchange type and several others.
- Update several events including street operation, number of lanes and speed regulations.
- Develop routing capabilities within the Road Inventory data model.
- Increase new data development tasks to enhance our data portfolio.
- Develop and implement data quality control standards.

- Implement metadata standards.
- Develop a system-wide Rail network inventory.
- Expand the use of automated quality assurance tools.

Anticipated products:

New data products and analysis will be completed this year.

Estimated task completion: 09-30-2025

Estimated staff salaries and benefits: **$576,445.45**

MassDOT staff members	% Time to task
Charles Major	100.0
Sudip Paudel	100.0
Florence Person	100.0
David Henriques	100.0
Courtney Quirmbach	100.0
Charlotte Mays	80.0
Nikhitha Yelukati	80.0
David DiNocco	50.0
Staff Inflator FFY25	None

Estimated task budget: $576,445.45

A.10 / Travel Forecasting, Data Collection and Transportation System Performance

Task Lead: Bob Frey

Task Purpose:

To measure and forecast statewide travel and system performance to meet state and federal planning requirements and provide decision-makers with information to help guide current and future transportation policies and investments. This task has two major components: Travel Data Analyses: Daily and historical travel data are collected and analyzed to measure and monitor performance, conditions, changes and trends in travel patterns, mode use, person movement, behavior and preferences, and Socioeconomic Projections: Changes in population, employment, housing, land use, and development patterns and trends are examined and projected for their effects on the transportation landscape. Periodic full-scale updates are performed to help inform development of regional and state transportation plans. Both of these components are recurring, ongoing activities that provide help to the latest planning assumptions by incorporating updated data collection methods, surveys, and projections.

Accomplishments in prior year:

- Continued current four-year MassDOT-wide contract providing historical and real-time traffic data through the Eastern Transportation Coalition's Transportation Data Marketplace (TDM). The contractor is the University of Maryland's agent for the Coalition, CATT Lab, which provides automated data sharing and analyses through the Regional Integrated Transportation Information System (RITIS) platform. Combined with INRIX travel data and other products, RITIS enables MassDOT, its affiliate agencies including regional planning agencies (RPA), and project consultants/contractors to measure and monitor performance, communicate information, and support numerous planning, operations, and research activities.
- Continued follow-up and coordination work for socioeconomic projections (The latest projections round was completed in summer 2023, working with a committee of stakeholders,the UMass Donahue Institute and Metropolitan Area Planning Council. Decennial population, household, and employment projections down to the municipal level were developed out to the year 2050, consistent with primary land-use scenarios incorporating anticipated development to help inform future long range transportation planning efforts on the regional and state levels).
- Performed various activities related to the statewide travel demand model including data requests and coordination of updates.
- Participated in various RITIS user groups, working groups and committees and provided assistance to RITIS product enhancements.

- Procured additional "big data" products and platforms through the ETC's Transportation Data Marketplace (including Replica).

Proposed activities for next year:

- Continue analyses of real-time and historical travel data through the Transportation Data Marketplace, including measuring and monitoring system performance and supporting planning, operations, and research activities.
- Working with the RPAs, perform follow up activities, including miscellaneous updates and documentation, to the recently completed socioeconomic projections.
- Continue data work and coordination of activities related to the statewide travel demand model.
- Continue funding participation in and review of expanded RITIS products for State DOTs (a pooled fund effort coordinated through The Eastern Transportation Coalition).

Anticipated products:

- Travel patterns, travel time and movement, mobility data and performance reports (including detailed analysis components in transportation studies).
- Follow up activities and miscellaneous additional updates and documentation to latest population, household, and employment projections.
- Data provision to internal and external customers and coordination of travel demand modeling activities.
- Miscellaneous reports and analyses.
- Expanded and improved RITIS reports and applications for travel data analyses.

Estimated task completion: 09-30-2025

Estimated staff salaries and benefits: **$59,002.89**

MassDOT staff members	% Time to task
Bob Frey	50.0
Staff Inflator FFY25	None

Estimated task budget: $70,282.44

Note: FFY25 costs of A.10 Subtask "Travel Data Analyses" will be funded using non-SPR funds. FFY25 costs for this contract are approximately $1.7 million.

Climate and Equity

A.8 / Environmental, Social, and Governance

Task Lead: TBD

Task Purpose:

The Environmental, Social, and Governance will coordinate ESG functions across MassDOT and is responsible for ensuring that all MassDOT components are working collaboratively and effectively towards accomplishing the organization's ESG goals. This role will also work externally and will represent MassDOT when the organization works collaboratively with other state, municipal, federal, and private partners in order to most effectively meet its mission. This group will also oversee the efforts to develop climate project management capabilities throughout MassDOT.

Accomplishments in prior year:

n/a

Proposed activities for next year:

Successfully execute notice to proceed (NTP) to the selected consultant team (TRC/VHB) and kick off the project, meeting milestones as approved in the scope of work. The climate work will be funded using state funds.

Develop an ESG plan for MassDOT.

Anticipated products:

Estimated task completion: 09-30-2026

Estimated staff salaries and benefits: **$193,805.56**

MassDOT staff members	% Time to task
ESG TPP II (TBH)	50.0
ESG TPP II (TBH)	50.0
ESG Manager (TBH)	50.0
Liz Williams	20.0
Staff Inflator FFY25	None

Estimated task budget: $193,805.56

A.9 / Transportation Equity

Task Lead: Liz Williams

Task Purpose:

This task includes activities related to building out MassDOT's portfolio of projects and processes that respond to needs of populations that are overburdened and underserved by transportation networks and services, including identifying equity-focused populations and promoting projects that reconcile and mitigate challenges

Accomplishments in prior year:

n/a

Proposed activities for next year:

Establish work plan for group, including assuming responsibilities for current projects including People and Transportation and the District Equity Initiative, and developing anticipated projects like the case study work stemming from Beyond Mobility

Anticipated products:

People and Transportation final report; DEI final report; scoping of new projects

Issue Briefs: This is an action item from Beyond Mobility: "MassDOT will develop issue briefs that more fully document unique transportation challenges and concerns of traditionally underrepresented demographic groups. These groups include but are not limited to people with disabilities; residents of rural communities; people of color; older adults; the LGBTQIA+ community; Asset Limited, Income Constrained, Employed (ALICE) people; the immigrant community; women; indigenous people; and youth. These Massachusetts-specific issue briefs will provide an in-depth summary of these communities' unique transportation needs and document action items and best practices for addressing them. "

Estimated task completion: 09-30-2025

Estimated staff salaries and benefits: **$151,577.31**

MassDOT staff members	% Time to task
ESG Manager (TBH)	25.0
ESG TPP II (TBH)	25.0

ESG TPP II (TBH)	25.0
Liz Williams	25.0
Staff Inflator FFY25	None

Estimated task budget: $451,577.31

Estimated consultant costs: **$300,000.00**

Subtask / contract #	Total cost:	Pre-FFY 2025:	FFY 2025:	Post-FFY 2025:	Consultant/Contractor Name:	Consultant NTP:	Contract End Date:
People and Transportation/ 123602	$500,000.00	$0.00	$0.00	$0.00	MassINC Polling Group	09-27-2023	04-01-2025
Issue Briefs/ TBD	$300,000.00	$0.00	$300,000.00	$0.00	TBD	TBD	TBD

Consultant notes: People and Transportation funded with non-SPR funding.

A.13 / Next Generation Massachusetts Household Travel Survey

Task Lead: Liz Williams

Task Purpose:

It has been over 10 years since MassDOT collected information to support the statewide travel demand model, and much has changed in the transportation landscape including the introduction of new modes and services; new commuting patterns and travel behaviors; and new data collection and survey analysis techniques. As a recurring, longitudinal survey, the Next Generation Massachusetts Household Travel Survey will be implemented over 10 years in four (4) waves. The objectives of the Next Generation Massachusetts Household Travel Survey (MTS) Wave 1 were to collect a representative sample of households across Massachusetts to support updates to the statewide travel demand model. Subsequent waves of the survey will focus on specific regions of the Commonwealth.

Accomplishments in prior year:

Completed Wave 1.

Proposed activities for next year:

- Proceed with regional data collection under Wave 2

Anticipated products:

Data, analysis, and visualization reflecting trips, households, vehicles, destinations, and tours. These products would be shared with CTPS, who are responsible for ongoing maintenance of the statewide travel demand model

Estimated task completion: 09-30-2025

Estimated staff salaries and benefits: **$20,507.91**

MassDOT staff members	% Time to task
Marthinus J. "MJ" Riekert	20.0
Liz Williams	5.0
Staff Inflator FFY25	None

Estimated task budget: $20,507.91

Consultant costs for A.13 will be paid with non-SPR funding. FFY25 consultant costs for A.13 are $1,000,000.00

A.15 / Municipal Grants Engagement

Task Lead: TBD

Task Purpose:

This group will be instrumental in connecting funding opportunities with local and regional needs, developing grant applications, communicating between MassDOT departments and other state or federal agencies, and organizing grant related information. All municipal facing work will be conducted with an emphasis on supporting rural and environmental justice (EJ) communities.

Accomplishments in prior year: N/A

Proposed activities for next year:

- Lead discussions within MassDOT, state and federal representatives, municipal staff, and regional stakeholders in identifying project priorities and funding needs.
- Oversee communications between various MassDOT departments and divisions related to funding opportunities to gather or disseminate information, obtain concurrence on certain topics, schedule meetings, and similar tasks.
- Manage the preparation of MassDOT grant applications and supporting documentation in an organized and timely fashion with great attention to detail.
- Provide guidance to municipalities on the appropriate funding programs for their projects, including both state and federal opportunities.

Anticipated products:

Successful support of grant submittals for cities and towns across Massachusetts.

Estimated task completion: 09-30-2025

Estimated staff salaries and benefits: **$267,839.73**

MassDOT staff members	% Time to task
MGE Manager	100.0
Grants TPP (TBH)	50.0
Grants TPP (TBH)	50.0
Grants TPP (TBH)	50.0
Grants TPP (TBH)	50.0
Staff Inflator FFY25	None

Estimated task budget: $267,839.73

MPO Activities

A.11 / Implementation of Federal Programs and Regulations

Task Lead: Derek Krevat

Task Purpose:

Activities under this task will include the administration of the following discrete federal programs: Congestion Mitigation Air Quality Improvement Program (CMAQ), Federal Lands Access Program (FLAP), Scenic Byways, and Title VI strategies and compliance. This task will also include the administration of the Safe Routes to School (SRTS) education and infrastructure programs.

Accomplishments in prior year:

- CMAQ was administered successfully with two consultation committee meetings held and a full program of projects was identified for the State Transportation Improvement Program (STIP).
- The annual CMAQ report was completed and sent to FHWA to detail CMAQ obligations from FFY 2023.
- CMAQ analysis spreadsheets that incorporated new emissions factors from the MOVES Model were distributed to regional partners for their use at CMAQ Consultation Committee meetings.
- The MPO Activities section coordinated with MassDOT's Office of Diversity and Civil Rights (ODCR) to distribute Title VI report guidance and Title VI reports were received and reviewed by MPO Activities and ODCR staff.
- FLAP was administered successfully with the obligation of federal funds for previously identified projects. Details for projects awarded in FFY 2023 were coordinated and implemented.
- The SRTS infrastructure program project solicitation was implemented, and six additional projects were awarded for programming in the 2025-2029 STIP. A process for a new project solicitation in FFY 2025 has been developed.
- MPO Activities staff continued to support regional partners' efforts to pursue funding through the federal Scenic Byways Program.
- Previously de-obligated Ferry Boat Program (FBP) funding was programmed for use in both the Boston Region and Southeastern Massachusetts Region for ferry boat projects.

Proposed activities for next year:

- Distribute CMAQ analysis spreadsheets to each metropolitan planning organization (MPO) for use in determining proposed CMAQ-funded projects' emissions reductions.
- Hold CMAQ Consultation Committee meetings.
- Compile notes from the CMAQ Consultation Committee meeting(s) and record new CMAQ-eligible projects.
- Complete annual CMAQ report submission to FHWA through the User Profile and Access Control System (UPACS).

- Work with the Eastern Federal Lands Highway Division (EFLHD) to coordinate activities related to FLAP project solicitation and selection.
- Work with the Office of Diversity and Civil Rights (ODCR) on any revisions tothe Title VI reports from the MPOs.
- Work on activities related to MassDOT's Virtual Public Involvement (VPI) initiatives.
- In support of the Highway Statistics 500-series reporting requirements, distribute a survey to all Massachusetts municipalities in order to obtain the information necessary to complete the Local Highway Finance Form (Form 536). Continue work to address discrepancies in MassDOT's Highway Statistics 500-series reporting.
- Continue to work with AECOM to support the administration of MassDOT's SRTS Program.
- Continue to implement the SRTS educational program focused on growing the number of participating schools, especially in underserved communities (staff and consultant).
- Continue to improve the SRTS infrastructure program and undertake a new project solicitation to fill the current FFY 2029 placeholder in the STIP.
- Host and/or lead SRTS pedestrian and bicycle events (e.g., walk/bike to school, safety trainings, etc.).
- Support the Highway Division in the design and construction of SRTS infrastructure projects that have been initiated and approved through the Division's Project Review Committee (PRC).
- Provide grant application assistance and coordination for any new Scenic Byway funding that becomes available.
- Coordinate all Ferry Boat Program (FBP) activities.

Anticipated products:

- The determination of CMAQ-eligible projects.
- The programming of new SRTS infrastructure projects.
- SRTS education and infrastructure program implementation.
- MPO Title VI Reports.
- Programming of awarded FLAP projects in coordination with the Eastern Federal Lands Highway Division (EFLHD).

Estimated task completion: 09-30-2025

Estimated staff salaries and benefits: **$71,728.05**

MassDOT staff members	% Time to task
Miranda Briseno	100.0
Staff Inflator FFY25	None

Estimated task budget: $71,728.05

A.12 / Metropolitan Planning Support and Oversight

Task Lead: Derek Krevat

Task Purpose:

Activities under this task include liaisons assisting in the development and oversight of MPO 3C certification documents such as Regional Transportation Plans (RTPs), Transportation Improvement Programs (TIPs), and Unified Planning Work Programs (UPWPs), and coordination and oversight of MPO planning deliverables through their respective UPWPs. Additionally, MPO liaisons will assist regional partners with target setting activities for required federal performance measures. MPO Activities staff will also assist with planning and corridor studies as needed.

Accomplishments in prior year:

- All thirteen regions within the Commonwealth drafted and endorsed UPWPs, TIPs, and RTPs that were submitted to federal partners for approval.
- Multiple amendments to TIPs and UPWPs were drafted and endorsed across all the MPOs, requiring oversight and administration by the MPO Activities Group.
- All thirteen regions adopted statewide safety performance measures (PM1), as required by the Federal Highway Administration (FHWA) for Calendar Year (CY) 2024.
- The MPO Activities group facilitated the development of contracts providing matching funds for the planning regions receiving Safe Streets and Roads for All (SS4A) planning grants. Additional federal grants received by communities were placed onto UPWPs and TIPs as necessary.
- MPO liaisons coordinated with MPOs that have implemented discretionary TIP funding programs (e.g. CTPS's Community Connections Program and CMRPC's microprojects program) to ensure projects funded through these programs were implemented properly. Other creative ideas for the use of TIP funding were coordinated with applicable regions.
- Various memoranda of understanding (MOUs) were developed and endorsed by applicable stakeholders.
- Managed contracts for regional programs and projects.
- Participated in federal certification reviews.

Proposed activities for next year:

- All thirteen regions within the Commonwealth will draft and endorse 3C documents, including TIPs and UPWPs.
- The MPO Activities group will coordinate the setting of Federal Highway Administration (FHWA) performance targets for Calendar Year (CY) 2025 safety measures (PM1) and will review any relevant federal reporting associated with the PM2 and PM3 measure areas.
- MPO liaisons will work with their respective MPO partners to ensure the development of 3C documents according to schedule.

- MPO liaisons will also work with their respective MPO staffs to continue the delivery of planning activities programmed within UPWPs and look towards ways of improving the utility and quality of MPO staff-produced planning products.
- Work will continue on ensuring that all matching funds for SS4A planning grants are administered properly and that all necessary contracts for projects under discretionary TIP programs are developed.
- Participation in federal certification review processes as needed.
- Participation in regional and state planning studies and working groups as needed.
- Manage contracts for regional programs and projects when necessary.

Anticipated products:

Most activities are ongoing throughout the year; TIPs and UPWPs will be developed by summer 2025 with approval by reviewing partners before the start of FFY 2026.

Estimated task completion: 09-30-2025

Estimated staff salaries and benefits: **$154,348.32**

MassDOT staff members	% Time to task
Christopher Klem	100.0
TPP II TBH	100.0
Staff Inflator FFY25	None

Estimated task budget: $154,348.32

A.14 / State Transportation Improvement Program Coordination and Capital Planning Support

Task Lead: Derek Krevat

Task Purpose:

Work under this task involves supporting the development of the annual Capital Investment Plan (CIP) update (see Task A.2 "Capital Planning Development and Coordination," for more details) and leading the development of the Federal Fiscal Year (FFY) 2026 - 2030 State Transportation Improvement Program (STIP) update. Work also includes the oversight and internal/external coordination of an electronic STIP (eSTIP) application. The STIP is a financially constrained document that contains a listing of all federally funded transportation projects in the Commonwealth of Massachusetts. It is a combined effort among MassDOT, Metropolitan Planning Organizations (MPOs), Regional Transit Authorities, and a number of state agencies that work to design and build highways and transit projects.

Accomplishments in prior year:

- Coordinated the maintenance of the FFY 2024-2028 STIP.
- Produced the FFY 2025-2029 STIP accounting for apportionments and programs under the Bipartisan Infrastructure Law (BIL).
- Supported the production of the SFY 2025-2029 CIP Update.
- Continued to implement the electronic STIP (eSTIP) application.
- Assisted with the coordination and programming of special federal-aid sources.
- Continued efforts to integrate FHWA's FMIS System into eSTIP to better track actual obligations.

Proposed activities for next year:

- Support the State Fiscal Year (SFY) 2026-2030 CIP and associated mapping, analysis, and public engagement activities.
- Lead the development of the FFY 2026-2030 STIP and incorporate any new information and guidance materials coming from the BIL.
- Coordinate the maintenance of the FFY 2025-2029 STIP.
- Develop and coordinate responses to any federal planning findings on the STIP on a quarterly basis.
- Assist with the coordination and programming of special federal-aid sources.
- Continue incorporating transit projects into eSTIP.
- Serve as the Project Champion for the second phase of the research project, "Measuring Accessibility to Improve Public Health" (see SPR II for more details) and assist with other CIP process improvements.

Anticipated products:

- FFY 2026-2030 STIP.
- eSTIP application process improvements.
- SFY 2026-2030 CIP Assistance.

Estimated task completion: 09-30-2024

Estimated staff salaries and benefits: **$186,065.73**

MassDOT staff members	% Time to task
Derek Krevat	100.0
Derek Shooster	100.0
Staff Inflator FFY25	None

Estimated task budget: $186,065.73

Multimodal Planning

A.16 / Bicycle and Pedestrian Planning

Task Lead: Peter Sutton

Task Purpose:

To provide continued support for bicycle and pedestrian planning activities in Massachusetts in order to promote healthy, safe, and accessible non-motorized transportation options. This task will serve to continue implementation and advancement of the recommendations of the Statewide Pedestrian Plan and the Statewide Bicycle Plan. Additional work under this task will involve providing assistance to MassDOT Highway District offices, MPOs, local governments, community-based organizations, and advocacy efforts in order to encourage, educate, plan, and design pedestrian and bicycle facilities.

Accomplishments in prior year:

- Organized and participated in Moving Together 2023.
- Organized and attended the Massachusetts Bicycle and Pedestrian Advisory Board Meetings.
- Organized and attended MassTrails Team Meetings.
- Continued implementation of the Bicycle and Pedestrian Plans.
- Completed Next Generation of Bike and Ped Project Prioritization On-Call Assignment

Proposed activities for next year:

- Organize and participate in Moving Together 2024.
- Organize and participate in Bay State Bike Week 2025 (staff).
- Organize and attend the Massachusetts Bicycle and Pedestrian Advisory Board Meetings (staff).
- Organize and attend the MassTrails Team Meetings (staff).
- Continue to oversee and participate in OTP-specific implementation activities of the Statewide Bicycle and Pedestrian Plans (staff).
- Work with Highway Division and other parties to initiate projects from the Next Generation of Bike and Ped Project Prioritization

Anticipated products:

- Moving Together Conference 2025.
- Bay State Bike Week 2025.
- Continued Implementation of Massachusetts Statewide Bicycle and Pedestrian Plans.

Estimated task completion: 09-30-2025

Estimated staff salaries and benefits: **$108,096.63**

MassDOT staff members	% Time to task
Peter Sutton	100.0
Staff Inflator FFY25	None

Estimated task budget: $108,096.63

A.17 / Corridor Planning Studies

Task Lead: Ethan Britland

Task Purpose:

To perform, participate in, and manage several types of transportation planning studies, conducted either internally or by other entities, such as regional planning agencies and other MassDOT Divisions. The level of involvement is project-specific and includes activities such as study development and analysis, public participation, coordination, technical assistance, and review. Often, these studies are part of the standard planning, design, and environmental processes required to advance a transportation project forward to implementation.

Accomplishments in prior year:

- Completed the Route 1A East Boston Corridor Study (SPR funded for consultant costs).
- Completed the Northern Tier Passenger Rail Study (SPR funded for consultant costs).
- Continued to conduct the Kosciuszko Circle/Morrissey and Day Boulevard Study (non-SPR funded for consultant costs).
- Procured and initiated the Newton Corner Long-Term Planning Study (non-SPR funded for consultant costs).
- Procured and initiated the Tobin Bridge Long-Term Planning Study (non-SPR funded for consultant costs).

Proposed activities for next year:

- Continue to conduct the Newton Corner Long-Term Planning Study.
- Continue to conduct the Tobin Bridge Study Long-Term Planning Study.
- Complete the Kosciuszko Circle/Morrissey and Day Boulevard Study .
- Begin Route 20 Study (non-SPR funded for consultant costs)

Anticipated products:

- Kosciuszko Circle/Morrissey and Day Boulevard Study Final Report .

Estimated task completion: 09-30-2025

Estimated staff salaries and benefits: **$347,304.66**

MassDOT staff members	% Time to task
Ethan Britland	100.0
Patrick Snyder	100.0
Rachel Kelly	100.0

Makaela Niles	60.0
Staff Inflator FFY25	None

Estimated task budget: $347,304.66

Estimated consultant costs: $0.00

Subtask / contract #	Total cost:	Pre-FFY 2025:	FFY 2025:	Post-FFY 2025:	Consultant/Contractor Name:	Consultant NTP:	Contract End Date:
Newton Corner Long-Term Planning Study (non-SPR funded for consultant costs) / 123604	$1,055,005.00	$0.00	$0.00	$0.00	Vanasse Hangen Brustlin Inc.	11-22-2023	05-31-2025
Kosciuszko Circle and William T. Morrissey Boulevard Study (non-SPR funded for consultant costs) / 116484	$1,906,185.00	$0.00	$0.00	$0.00	AECOM	04-29-2022	12-31-2024
Maurice J. Tobin Bridge Long-Term	$2,453,956.00	$0.00	$0.00	$0.00	VHB	06-17-2024	06-30-2026

Strategic Planning Study (non-SPR funded for consultant costs) / 125961							
Route 20 Sturbridge (non-SPR funded for consultant costs) / None	$500,000.00	$0.00	$0.00	$0.00	TBD	None	None

Consultant notes: Tobin Bridge study funded with toll revenue funding (non-SPR funding); all other Multimodal studies are funded with NFA (non-SPR funding)

A.18 / CTPS Annual On-Call Planning Assistance

Task Lead: Bob Frey

Task Purpose:

To expeditiously provide recurring technical and miscellaneous staff support for planning studies, travel modeling, data management, and other related tasks. Tasks assigned to the Central Transportation Planning Staff are intended to support OTP's function as a shared/enterprise service for MassDOT.

Accomplishments in prior year:

Ongoing and recurring tasks including Road Inventory support, travel model assistance, and miscellaneous study support.

Proposed activities for next year:

Ongoing and recurring tasks including Road Inventory support, travel model assistance, and miscellaneous study support.

Anticipated products:

Road Inventory support and maintenance.

Statewide Travel Demand Model assistance, including select regional planning agency (RPA) modeling coordination.

Miscellaneous studies and related assistance.

Estimated task completion: 09-30-2025

Estimated task budget: $440,000.00

Estimated consultant costs: **$440,000.00**

Subtask / contract #	Total cost:	Pre-FFY 2025:	FFY 2025:	Post-FFY 2025:	Consultant/Contractor Name:	Consultant NTP:	Contract End Date:
Statewide Planning Assistance (CTPS) / 124352	$440,000.00	$0.00	$440,000.00	$0.00	CTPS	10-01-2023	09-30-2024

A.19 / Freight Planning

Task Lead: Makaela Niles

Task Purpose:

To continue to implement immediate infrastructure and policy strategies recommended in the approved Massachusetts Freight Plan. Other annual activities include 1) monitoring and responding as needed to multimodal freight trends, funding opportunities, legislation and rulemaking, and 2) participation in regional and national freight coordination efforts.

Accomplishments in prior year:

- Continued to explore implementation strategies from the approved Massachusetts Freight Plan as applicable.
- Monitored freight trends.
- Monitored Notices of Funding Opportunities, legislation, and rulemaking.
- Participated in regional and national freight coordination efforts, including coordination with the Freight Advisory Committee.
- Supported the MassDOT Rail and Transit Division's freight planning activities.

Proposed activities for next year:

- Continue to explore implementation strategies from the approved Massachusetts Freight Plan as applicable.
- Continue to monitor freight trends.
- Continue to participate in the Freight Operations Group
- Continue to monitor Notices of Funding Opportunities, legislation, and rulemaking.
- Continue to participate in regional and national freight coordination efforts, including coordination with the Freight Advisory Committee.
- Support the freight planning activities of MassDOT Divisions as needed.

Anticipated products:

Estimated task completion: 09-30-2025

Estimated staff salaries and benefits: **$24,976.74**

MassDOT staff members	% Time to task
Makaela Niles	30.0
Staff Inflator FFY25	None

Estimated task budget: $24,976.74

A.20 / On-Call Contracts

Task Lead: Makaela Niles

Task Purpose:

Continue to employ Five (5) consultant contracts for on-call services in order to expeditiously initiate and conduct planning-level assignments. The time frames of these assignments vary, ranging from short-term assignments, such as technical analysis of transportation data, to long-term efforts, such as conceptual studies that may include a technical component along with coordination and interaction with other state agencies, advisory groups, stakeholders, and/or members of the public. These assignments are intended to support OTP's function as a shared/enterprise service for MassDOT, and also provide opportunities to examine and implement state of the art practices as part of our statewide transportation planning process.

Accomplishments in prior year:

- Scoped and initiated new on-call assignments
- Completed Conveyal Study
- Completed Zero-Emissions School Bus Study
- Completed I-290 Traffic Operations and Safety Master Plan
- Completed Next Generation Bike and Pedestrian Vision Map
- Completed Freight Planning Document Accessibility Services
- Completed 2024-2028 CIP Support
- Completed 2023 TAMP Update
- Completed 2025-2029 CIP Support
- Completed 2023-2024 TAMP Support
- Completed Route 9 and Speen Street Bike and Ped Access Planning Study
- Continued Long-term Route 114 Study
- Continued Route 3A Quincy Study
- Continued Inner North Shore Access Demand Planning Study
- Continued Route 146 - Milbury to Uxbridge Study
- Continued Tisbury Beach Road Study
- Continued EERPAT Refresh
- Continued Public Participation Plan Update

Proposed activities for next year:

- Scope and procure (TBD) on-call services contracts
- Scope and initiate new on-call contract assignments.
- Complete the Long-term Route 114 Study
- Complete the Route 3A Quincy Study

- Complete the Inner North Shore Access Demand Planning Study
- Complete the Route 146 - Milbury to Uxbridge Study
- Complete the Tisbury Beach Road Study
- Complete the EERPAT Refresh
- Complete the Public Participation Plan Update

Anticipated products:

- Scope, initiate and conduct various on-call assignments.
- Long-term Route 114 Study
- Route 3A Quincy Study
- Inner North Shore Access Demand Planning Study
- Route 146 - Milbury to Uxbridge Study
- Tisbury Beach Road Study
- EERPAT Refresh
- Public Participation Plan Update

Estimated task completion: 09-30-2025

Estimated staff salaries and benefits: **$8,325.58**

MassDOT staff members	% Time to task
Makaela Niles	10.0
Staff Inflator FFY25	None

Estimated task budget: $1,111,498.58

Estimated consultant costs: **$1,103,172.00**

Subtask / contract #	Total cost:	Pre-FFY 2025:	FFY 2025:	Post-FFY 2025:	Consultant/Contractor Name:	Consultant NTP:	Contract End Date:
Contract #1 - Vanasse Hangen Brustlin / 120247	$500,000.00	$350,884.00	$149,116.00	$0.00	Vanasse Hangen Brustlin	11-02-2022	09-30-2025
Contract #2 - Cambridge Systematics / 120248	$500,000.00	$178,995.00	$321,005.00	$0.00	Cambridge Systematics	10-01-2022	09-30-2025
Contract #3 - ARUP / 120249	$500,000.00	$283,391.00	$216,609.00	$0.00	ARUP	10-11-2022	09-30-2025
Contract #4 - HNTB / 120250	$500,000.00	$383,328.00	$116,672.00	$0.00	HNTB	11-23-2022	09-30-2025
Contract #5 - Nelson Nygaard / 120251	$500,000.00	$200,230.00	$299,770.00	$0.00	Nelson Nygaard	02-15-2023	09-30-2025

Public Private Development Unit

A.21 / Access Management Through Development Review and Land Disposition

Task Lead: Lionel Lucien

Task Purpose:

To implement access management through the review of private development proposals and the disposition of MassDOT land or railroad right-of-way (ROW). 1. Implement Access Management principles in the review of all private development projects in accordance with the Project Development and Design Guidebook (PDDG).

2. Work with the Highway Division in the revision of the PDDG Chapter on Access Management

3. Review all canvases related to the purchase or lease of MassDOT-owned property.

4. Review all requests for break-in access-controlled lines along state and interstate highways.

5. Review all requests to use, acquire, or dispose of railroad right of way.

6. Ensure that canvassing decisions are consistent with MassDOT policies on safety and mobility.

7. Review of permitted development site access to ensure that management decisions maintain safety and mobility. Note that 100% of PPDU staff time is programmed under this task for greater administrative ease in time reporting. PPDU staff plan to divide their time between PPDU tasks as follows:

A.21/ Access Management Through Development Review and Land Disposition: Lionel Lucien 25% FTE; William Simon 20% FTE; TPP III (TBH) 100% FTE A.22 / Coordination and Consultation with Developers and Project Stakeholders: Lionel Lucien 15% FTE; William Simon 30% FTE A.23 / Development Review through the MEPA and MassDOT Access Permit Processes: Lionel Lucian 20% FTE; William Simon 20% FTE A.24 / MassDOT Policies Supported and Incorporated in Inter-Agency Objectives: Lionel Lucien 20% FTE A.25 / Mitigation, Transportation Demand Management, and Monitoring Programs for Development Projects: Lionel Lucien 20% FTE, William Simon 30% FTE

Accomplishments in prior year:

- 6 ROW canvases were reviewed by the Public Private Development Unit (PPDU).
- Working with the MBTA, issued a Request for Proposal to develop better methodology to identify impacts to the transit system and make more realistic and implementable mitigation.
- Implemented, in collaboration with MassPort and the MBTA, a list of capital improvement projects to keep the Anderson Regional Transportation Center in a state of good repair. Projects to be implemented included: parking lot repairs and repaving, roof repair and upgrades to parking revenue collection system.

Proposed activities for next year:

All coordination activities performed in FFY 2024 are intended to continue throughout 2025.

Anticipated products:

Internal staff coordination with MassDOT Divisions. External staff coordination with other agencies.

Estimated task completion: 09-30-2025

Estimated staff salaries and benefits: **$266,983.03**

MassDOT staff members	% Time to task
Lionel Lucien	100.0
William Simon	100.0
TPP III (TBH)	100.0
Staff Inflator FFY25	None

Estimated task budget: $266,983.03

A.22 / Coordination and Consultation with Developers and Project Stakeholders

Task Lead: Lionel Lucien

Task Purpose:

To conduct consultation meetings and provide technical guidance to developers and project stakeholders on transportation policies, planning, and design issues during the development of private projects. Work under this task will include the following specific items: 1.) Review all Transportation Scoping Letters (TSL); confirm the assumptions; and provide feedback on the information included in transportation impact assessment studies. 2.) Conduct consultation meetings on all technical issues, transportation analyses and conceptual plans for mitigation. 3.) Coordinate with all appropriate MassDOT Division units and the MBTA to seek inputs into the early development of transportation infrastructure to mitigate project impacts. 4.) Coordinate as necessary with other state agencies, cities, and towns. 5.) Respond to all questions and requests for information regarding the MassDOT permitting process.

Accomplishments in prior year:

- Conducted a significant number of meetings to provide technical support to developers and their consultants as part of their Massachusetts Environmental Policy Act (MEPA) submissions and review processes.
- Provided technical review and support on transportation issues for the environmental permitting of MassDOT/MBTA air rights projects.

Proposed activities for next year:

- All coordination activities performed in FFY 2024 are intended to continue throughout FFY 2025.
- Work with MassDOT's Office of Real Estate and Asset Development (OREAD) and potential developers to provide assistance and guidance on development proposals.

Anticipated products:

- Internal staff coordination with MassDOT Divisions, MassPort, and the MBTA.
- External staff coordination with other agencies, including the Massachusetts Executive Office of Energy and Environmental Affairs and the Executive Office of Housing and Economic Development.

Estimated task completion: 09-30-2025

A.23 / Development Review through the MEPA and MassDOT Access Permit Processes

Task Lead: Lionel Lucien

Task Purpose:

To provide timely and thorough technical reviews and evaluations of the anticipated transportation impacts of development projects under the Massachusetts Environmental Policy Act (MEPA) and as part of the approval process for access permits issued by MassDOT. Work under this task will include the following specific items. 1. Review and issue comments on behalf of MassDOT and the MBTA on all Environmental Notification Forms, Environmental Impact Reports, and Notices of Project Change to ensure consistency with MassDOT policies, regulations, and design standards.2.Adequately review all environmental documents attached to transportation studies for consistency with the latest transportation impact assessment guidelines.3.Ensure the coordination of transportation-related comments between all MassDOT Divisions and the MBTA, cities, towns, and stakeholders as appropriate.4. Coordinate with the MEPA Office to address outstanding issues on projects and timely submission of all MEPA comments.5. Review and submit comments on all Requests for Determination and Requests for Advisory Opinion when asked by the MEPA Office.6. Provide technical assistance to the MEPA Office and/or project stakeholders on all transportation-related issues.

Accomplishments in prior year:

- Coordinated throughout the year with all MassDOT Divisions, the MBTA, MassPort, and cities and towns on technical reviews for development projects and responded to several public inquiries.
- Reviewed projects' commitments to provide pedestrian, bicycle, and/or transit accommodations.
- Reviewed all conceptual plans or permitted projects for Complete Streets accommodations.

Proposed activities for next year:

- All coordination activities performed in FFY 2024 are intended to continue throughout FFY 2025.
- Reviews of major developments include: Dorchester Bay City, Union Point, Encore Boston Harbor, Route 20 corridor in Charlton.
- Continue to work with the City of Boston to establish mitigation bank and to collect funds as mitigation toward addressing transportation impacts in the Dorchester Bay City area.

Anticipated products:

- Internal staff coordination with MassDOT Divisions and the MBTA.
- External staff coordination with other agencies including MEPA, MassPort, and the Massachusetts Department of Conservation and Recreation (DCR).

- Timely reviews and submissions of all MassDOT comments on environmental documents.

Estimated task completion: 09-30-2025

A.24 / MassDOT Policies Supported and Incorporated in Inter-Agency Objectives

Task Lead: Lionel Lucien

Task Purpose:

1) Represent MassDOT on the Interagency Permitting Board. Attend all meetings and review submissions from cities and towns for Priority Development Site Designations; review and approve requests for 43D Expedited Permitting designations; and participate in all activities to expedite the permitting process at the state level.

2) Work with MassDOT Divisions to review the overall permitting and approval process for developments with an emphasis on reviewing MassDOT/MBTA's approach to implementing transportation mitigation.

3) Represent MassDOT on the Woburn Anderson Regional Transportation Center (RTC) Executive Committee. Participate in the management and oversight of the facility to promote multimodal objectives and fiscal solvency.

Accomplishments in prior year:

- Reviewed 18 transportation-related grant applications for the Massachusetts Gaming Commission's grant mitigation program.
- Assisted with the management of the Anderson Regional Transportation Center. The ARTC has started to generate revenues based on increased airport ridership.
- Provided technical support on permitting and economic development issues to five cities and towns that have adopted 43D Expedited Permitting.
- Delivered the 4th International TRB Access Management Conference in Boston on June 24-26, 2024.

Proposed activities for next year:

- All activities performed in FFY 2024 are intended to continue throughout FFY 2025.
- Conduct internal and external planning coordination with local, national, international stakeholders to ensure participation.
- Review of transportation-related grant applications for the Massachusetts Gaming Commission's grant mitigation program.
- Update the 2014 Transportation Impact Assessment Guidelines for consistency with MassDOT policies and regulations.

Anticipated products:

- Internal staff coordination with MassDOT Divisions and the MBTA.

- External staff coordination with MassPort, the Massachusetts Department of Housing and Economic Development (HED), the Massachusetts Department of Conservation and Recreation (DCR) and other agencies.
- Draft of new MassDOT/EEA Transportation Impact Assessment Guidelines.

Estimated task completion: 09-30-2025

A.25 / Mitigation, Transportation Demand Management, and Monitoring Programs for Development Projects

Task Lead: Lionel Lucien

Task Purpose:

Secure appropriate multimodal mitigation benefits consistent with MassDOT policies and to ensure that developers implement and follow up on their mitigation commitments. Work under this task will include the following specific items:

- Negotiate appropriate multimodal mitigation measures with private developers in the form of both capital and operational improvements.
- Prepare and issue Section 61 Findings on behalf of MassDOT to formalize mitigation measures.
- Ensure the timely issuance of needed MassDOT permits in accordance with State Highway Access Regulations.
- Ensure that project proponents meet all commitments to implement mitigation required as part of their Section 61 Findings.
- Review all submitted Transportation Monitoring Reports.
- Additionally, consultant support will be procured to assist MassDOT to revise the existing MassDOT/EEA Transportation Impact Assessment Guidelines to address a number of issues raised by consultants and the reviewers and also to incorporate the latest MassDOT policies, regulations, and engineering directives.
- Implement the TIA Monitoring Report tool for electronic submission of TIA monitoring reports and analysis of the data from those reports.

Accomplishments in prior year:

- Issued 10 Section 61 Findings for projects previously reviewed.
- Provided support to developers in designing and implementing transportation demand management (TDM) programs.
- Monitored recently built projects that received a Section 61 Finding from MassDOT using the Transportation Impact Assessment Monitoring Report (TIAMR) tool.
- Worked with IT to make the TIAMR more user-friendly.

Proposed activities for next year:

- Coordination on activities performed in FFY 2024 will continue throughout FFY 2025.
- Collect developers' commitments to mitigation funds and monitor implementation of targeted study/improvements.

Anticipated products:

- Internal staff coordination with MassDOT Divisions and the MBTA.

- External staff coordination with MassPort, HED, DCR and other agencies.
- Approved research proposal and contracts for the update of MassDOT/EEA Transportation Impact Assessment Guidelines.

Estimated task completion: 09-30-2025

Estimated task budget: $50,000.00

Estimated consultant costs: **$50,000.00**

Subtask / contract #	Total cost:	Pre-FFY 2025:	FFY 2025:	Post-FFY 2025:	Consultant/Contractor Name:	Consultant NTP:	Contract End Date:
MassDOT/EEA Transportation Impact Assessment Guidelines Revision / None	$150,000.00	$0.00	$50,000.00	$100,000.00	TBD	None	None

Sustainable Transportation

A.26 / Climate Adaptation Vulnerability Assessment

Task Lead: Jules Williams

Task Purpose:

To identify a prioritized set of high-risk climate hazards and associated high-risk transportation assets throughout the state using a rigorous methodology that integrates GIS tools, climate projections, and hydrologic and hydraulic models. In a second phase, the project will provide recommendations about how project results could be integrated into planning, asset management, operations, and maintenance activities. This task also includes coordination with adaptation initiatives by MassDOT Divisions, other state agencies, and Metropolitan Planning Organizations (MPOs). This task supports compliance with Executive Order 569, which requires state agencies to assess vulnerability to climate change and extreme weather events and identify adaptation options for assets. This work has been identified as one of the inputs to MassDOT's Resiliency Improvement Plan in the latest State Hazard Mitigation Plan.

Accomplishments in prior year:

- WRF Hydro model runs initiated for developing floodplains in the third hydrological domain.
- Final flood plain and erosion maps generated for first hydrological domain
- Final asset exposure and do-nothing costs developed for all in scope assets in first hydrological domain
- Summary results presented to each MassDOT division
- Resiliency solutions cross walk developed and case study developed for selected asset infirst hydrological domain

Proposed activities for next year:

Continuing the development of floodplains, maps of erosive levels of concern, asset exposure and applying risk analysis.

Anticipated products:

- Floodplain maps of flooding depth and extent.
- Maps of erosive potential.
- Exposure identified for multimodal transportation assets.
- Risk quantified for multimodal transportation assets.

Estimated task completion: 09-30-2025

Timeline for new consultant support: Climate Adaptation Vulnerability Assessment

Consultant name: WSP
Scope development and FHWA review/approval: No Date

Total duration of task: No Date

Estimated staff salaries and benefits: **$76,608.63**

MassDOT staff members	% Time to task
Jules Williams	60.0
Staff Inflator FFY25	None

Estimated task budget: $261,608.63

Estimated consultant costs: **$185,000.00**

Subtask / contract #	Total cost:	Pre-FFY 2025:	FFY 2025:	Post-FFY 2025:	Consultant/Contractor Name:	Consultant NTP:	Contract End Date:
Climate Adaptation Vulnerability Assessment / 106882	$3,885,002.00	$3,283,000.00	$602,002.00	$0.00	WSP	01-01-2020	09-30-2024

Consultant notes: "Consultant costs" represent the balance of $3.885 million in SPR funding to be spent down in FFY 2025 (contract 106882).

Project funded with $3.885 million in SPR and subsequently with $11.937 million in PROTECT funding (included into contract 106882 - includes state match).

A.27 / GHG Mitigation Analysis, Research, Guidance & Regulatory Requirements

Task Lead: Jules Williams

Task Purpose:

To support the Commonwealth's efforts to meet ambitious greenhouse gas (GHG) reduction goals. The scope of OTP's work under this task includes undertaking studies of GHG mitigation opportunities in Massachusetts; providing transportation planning input into state government efforts to develop, monitor and update the Commonwealth's Climate Policies; offering feedback on MassDOT's role in reducing statewide emissions; supporting Metropolitan Planning Organizations' (MPO) GHG impact estimation and reporting; continuing to collect data related to on-road GHG emissions as well as MassDOT and MBTA emissions. The Commonwealth's new climate law established a GHG emissions limit for the transportation sector as part of requirements designed to reach specified emissions targets. The federal government's Infrastructure Investment and Jobs Act (IIJA) required a carbon reduction strategy to be developed by state DOTs by November 2023 and FHWA issued guidance on the development of this strategy. A new federal performance measure on GHG emissions from vehicles operating on the National Highway System is expected to be finalized in FFY 24 which could require MassDOT to set a performance target for GHG emissions that is consistent with the Biden Administration's net zero target.

Accomplishments in prior year:

- Collected data from MassDOT divisions and developed estimate for annual MassDOT-MBTA GHG emissions.
- Supported MassDOT implementation of FHWA's GHG performance regulation until measure was vacated.
- Finished final draft of zero-emission school bus report and shared with relevant stakeholders for review.
- FHWA certified MassDOT's CRS.
- Drafted updates to the CRS, shared the update with MPOs, and submitted the updated CRS in the draft STIP.
- Finalized OCIR's contract with a consultant team for the development of the Comprehensive Climate Action Plan (CCAP)

Proposed activities for next year:

- Collaborate with GIS services on developing an internal dashboard for MassDOT MBTA GHG emissions data.
- Complete agency wide GHG emissions estimate
- Complete on-road GHG emissions estimate

- Scope and initiate project using big data to compare demographic and other characteristics of peak and non-peak VMT
- Update the CRS strategy in 2025 in collaboration with the MPO Activities Team to reflect pre-FFY25 CRP expenditure.
- Scope and initiate analysis of highway solar planning study.
- Scope and initiate analysis of "super drivers" using RMV odometer reading data.
- Support MassDOT review of consultant CCAP deliverables and provide contract management support to OCIR.
- Scope updates to GHG modeling tool and complete updates

Anticipated products:

- Annual GHG emissions estimates.
- Scope for highway solar planning study
- Updated CRS
- Updated GHG model

Estimated task completion: 09-30-2025

Estimated staff salaries and benefits: **$145,095.19**

MassDOT staff members	% Time to task
Daisy Brown	100.0
Max Natanagara	50.0
Jules Williams	20.0
Staff Inflator FFY25	None

Estimated task budget: $472,832.96

Estimated consultant costs: **$300,000.00**

Subtask / contract #	Total cost:	Pre-FFY 2025:	FFY 2025:	Post-FFY 2025:	Consultant/Contractor Name:	Consultant NTP:	Contract End Date:
Highway solar planning study/TBD	$300,000.00	$0	$300,000.00	$0	TBD	TBD	TBD

A.28 / Low Emissions Vehicles, Fuels and Infrastructure

Task Lead: Max Natanagara

Task Purpose:

To provide planning studies and other analyses on issues related to low-emission vehicles and infrastructure. Increased adoption of low emissions vehicles and fuels is targeted as part of Massachusetts' efforts to reduce emissions. A range of policies are in place that seek to increase adoption of these technologies. This impacts MassDOT and the transportation system in a number of ways: changes in motor fuel excise revenues; demand for new kinds of refueling in different locations; changes in the kinds of signage needed on highways; changes in vehicle operating costs and associated incentives to drive and changes in the amount, types and locations of pollutants emitted; and requests for how the transportation network can support increased uptake of these technologies.

Accomplishments in prior year:

- Supported NEVI implementation team with technical requests
- Served as evaluation committee member for NEVI solicitation
- Re-ran sample survey of drivers initially conducted for NEVI Plan development.
- Conducted survey on residential parking and garaging access as it relates to EV charging provision.
- Participated in discussions on forthcoming renewal of lease for MassDOT service plazas concerning EV charging infrastructure.

Proposed activities for next year:

- Complete scoping of Highway division fleet transition study and initiate project as appropriate
- Evaluate and document the case for future driver attitude surveys and a schedule and strategy for their procurement.
- Develop a strategy for using results of the residential parking/charging survey to inform future work
- Continue supporting the NEVI procurement team as appropriate.

Anticipated products:

- Scope and interim deliverables on Highway division fleet transition study
- Report on findings of statistical survey on EV driver long distance trip-making survey.
- Geospatial tool displaying results of residential parking/charging survey

Estimated task completion: 09-30-2025

Estimated staff salaries and benefits: **$68,301.82**

MassDOT staff members	% Time to task
Max Natanagara	50.0
Jules Williams	20.0
Staff Inflator FFY25	None

Estimated task budget: $68,301.82

Estimated consultant costs: **$0.00**

Consultant notes: Consultant support for survey and Highway division fleet transition study will use non-SPR funding.

Subtask / contract #	Total cost:	Pre-FFY 2025:	FFY 2025:	Post-FFY 2025:	Consultant/Contractor Name:	Consultant NTP:	Contract End Date:
Highway division fleet transition study/ TBD	$300,000.00	$0.00	$0.00	$0.00	TBD	TBD	TBD

Transit Planning

A.30 / Transit Planning Studies

Task Lead: Jonathan Church

Task Purpose:

To perform, participate in, and manage several types of transit planning studies, conducted either internally or by other entities, such as regional planning agencies and other MassDOT Divisions. The level of involvement is project-specific and includes activities such as study development and analysis, public participation, coordination, technical assistance, and review. Often, these studies are part of the standard planning, design, and environmental processes required to advance a transportation project forward to implementation.

Accomplishments in prior year:

- Initiated and conducting the Gilmore Bridge Mobility Improvements Study (non-SPR Funded for consultant costs).
- Procured the RIDE Electric Vehicle Feasibility Study (non-SPR Funded for consultant costs).
- Procured the Regional Rail Demand and Revenue Forecasting Tool (non-SPR Funded for consultant costs).
- Initiated the Regional Bus Assessment Update study to assist MassDOT's Rail and Transit Division and completed most task deliverables and four draft chapters

Proposed activities for next year:

- Initiate the RIDE Electric Vehicle Feasibility Study.
- Initiate Regional Rail Demand and Revenue Forecasting Tool.
- Continue the Gilmore Bridge Mobility Improvements Study.
- Procure and initiate the Water Transportation Study.
- Procure and initiate the Bus Awareness for Non-Transit Riders Study.
- Procure and initiate the Program for Mass Transportation update.
- Provide direction and oversight to CTPS staff on the Impact of Bus Priority Lanes on Emergency Services study (non-SPR Funded project)
- Complete the Regional Bus Assessment Update study for MassDOT's Rail and Transit Division.

Anticipated products:

- RIDE Electric Vehicle Feasibility Study, task deliverables, draft report and final report.
- Regional Rail Demand and Revenue Forecasting Tool, task deliverables .
- Gilmore Bridge Mobility Improvements Study, task deliverables, draft report and final report.
- Water Transportation Study, task deliverables.
- Bus Awareness for Non-Transit Riders Study task deliverables, draft report and final report.

- Program for Mass Transportation update, task deliverables (non-SPR Funded for consultant costs).
- Impact of Bus Priority Lanes on Emergency Services study, task deliverables, Draft Report and Final Report .
- Complete the Regional Bus Assessment Update study, task deliverables, draft report chapters and final report .

Estimated task completion: 09-30-2025

Estimated staff salaries and benefits: **$335,470.49**

MassDOT staff members	% Time to task
Patricia Cahill	100.0
Jonathan Church	100.0
Caleb Plummer	100.0
Arnav Chatterjee	100.0
Staff Inflator FFY25	None

Estimated task budget: $335,470.49

Consultant costs to be paid under 5304 funding in FFY2025: RIDE Electric Vehicle Feasibility Modeling $100,000; Regional Rail Demand Modeling Tool $1,000,000; Gilmore Bridge Mobility Improvements Study $480,000 (also in FY 2025 - $420,000 in Developer Mitigation funding); Bus Awareness for Non-Transit Riders Study $500,000.

SPR I Part B

Pavement Management

B.1 / Statewide Pavement Management Activities

Task Lead: Edmund Naras

Task Purpose:

The objective of the Pavement Management Program is to responsibly manage the pavement portion of the highway transportation network. The program provides a rational and uniform system for evaluating roadway conditions in order to improve the effectiveness of pavement preservation and rehabilitation strategies. Additionally, it provides analytical and evaluation tools that assist administrators and project managers with methods to improve the consistency of decision-making and to formulate strategies to optimize pavement network performance and the allocation of resources.

Accomplishments in prior year:

- Managed vendor data collection of over 7000+ Miles for pavement distress, rutting, geometric, GPS, LiDAR and video data for the Interstate System, NHS, Numbered Routes and other highways under MassDOT jurisdiction as part of new data collection services contract.
- Conducted Quality Assurance activities on 7000+ Miles of data to verify deliverables from Network Pavement Data Collection Services Contract for the Interstate, Non-Interstate NHS, State Numbered routes as well as other highways under MassDOT Jurisdiction.
- Current data deliverables including pavement distress, rutting, geometric, GPS, LiDAR and video data loaded onto web based viewing application for eventual department wide access.
- Entire LiDAR data set distributed to UMass researchers for asset and sidewalk inventory
- Submitted Interstate and Non-Interstate NHS pavement data for the Highway Performance Management System (HPMS).
- Utilized the MassDOT Pavement Management modeling, forecasting & optimized project selection tool to identify and prioritize NHS pavement programs.
- Developed an optimized multi-year program for the Interstate and Non-Interstate NHS. Integrated optimized program into the rolling 5-year STIP.
- Participated in scoping meetings with District, Bridge, Environmental and Highway Design staff to screen $100+ Million NHS project locations to establish items outside of pavement scope, identify preservation candidates, and prioritize future programming.
- Updated list of state numbered highways for improvements as part of the Municipal Paving Program.

Prioritized these sections by condition, NHS status, scope and other factors for rehabilitation over a five-year period.

- Performed correlation and certification on 12 pieces of equipment for ride quality testing utilized by Contractors, other Northeast State DOTs and MassDOT for Quality Control and Acceptance testing.
- Performed acceptance testing for ride quality on approximately 825+ lane miles.
- Reapplied over one-mile of High Friction Surface Treatment to Route 2-Fitchburgh NHS Project.

Continued monitoring performance of other EDC-2 High Friction Surfacing Projects statewide.

- Continued monitoring SHRP2 (R-26) pavement preservation sections on US Route 3 and reapplied fog-seal to paved shoulders.

Other segments are being prioritized for future preservation treatments

- Reviewed over 295 projects at various stages of design.
- Completed two “Higher Reclaimed Asphalt Pavement (RAP)” projects on Route 9-Belchertown and Route 2-Erving.

Research activities in High RAP mixtures are on-going under ISA with HSRC

- Conducted performance testing on Hot-In-Place (HIR) samples under ISA with HSRC
- Evaluated proposed criteria from the results of the Balanced Mix Design work done under ISA with HSRC against current MassDOT hot mix asphalt (HMA) design.

Balanced Mix Design testing protocols applied to all HMA mixtures approved in 2024.

- In accordance with EDC-7 goals for Environmental Product Declarations (EPDs), MassDOT notified contractors that EPDs will be required for all mixtures beginning in 2025.
- Federal Aid and Non-Federal Aid NHS Pavement Preservation activities were incorporated into 17 Contracts

Proposed activities for next year:

- Continue oversight for collection of over 7000+ Miles of pavement distress, rutting, geometric, GPS, LiDAR and video data for the Interstate System, NHS, Numbered Routes and other highways under MassDOT jurisdiction as part of new data collection services contract.
- Utilize MassDOT Automated Pavement Data Collection Vehicle to supplement data collection of pavement distress, rutting, geometric, GPS, LiDAR and video data for roadways paved after collection by the vendor for integration into overall data set.
- Conduct Quality Assurance testing using new Automated Pavement Data Collection Vehicle/Equipment to verify deliverables from Network Pavement Data Collection for the Interstate, Non-Interstate NHS, State Numbered routes as well as other highways under MassDOT Jurisdiction.

- Conduct Quality Assurance activities on 7000+ Miles of data to verify deliverables from Network Pavement Data Collection Services Contract for the Interstate, Non-Interstate NHS, State Numbered routes as well as other highways under MassDOT Jurisdiction.
- Perform annual maintenance and upgrades on the Automated Pavement Data Collection Vehicle, Pavement Friction Tester and Bumper Mounted Profilers.
- Perform ride quality acceptance testing for all new construction, resurfacing and preservation projects using the Bumper Mounted Profilers.
- Use Pavement Management Data to revise\develop 2026-2030 STIP for Interstate and Non-Interstate NHS projects.
- Continue Municipal Paving Program, while emphasizing rehabilitation and preservation of the municipally owned Non-Interstate NHS roadways.
- Manage consultant efforts to warehouse statewide municipally owned pavement condition data leveraging MassDOT's GIS online database structure and reporting capabilities.
- Oversee Interdepartmental Service Agreement (ISA) with UMass Dartmouth for continued support of pavement management activities including correlation of data collection equipment, implementation of new technologies and test methods, develop innovative pavement mixture designs (Superpave 5) and evaluations with existing designs, assist with evaluating Bridge Waterproofing Mixtures (SSC-W), and assess Asphalt Pavement sustainability evaluation methodologies LCA and INVEST for MassDOT implementation.
- Conduct testing on High Friction Surfacing using Dynamic Friction Tester
- Conduct testing on segregated pavements using Pavement Texture Meter
- Pilot Superpave 5 on Route 5-Northampton and Whately and Balanced Mix Design (BMD) in projects.
- Pilot program for high application tack coats utilizing spray pavers on HMA surfaces
- Mandate Environmental Product Declarations (EPDs) for all MassDOT HMA submittals
- Incorporate low-carbon transportation materials grants into 2025-2026 construction programs.

Anticipated products:

- Report on pavement condition data for Interstate, State-Maintained and NHS roadways and data required for the Highway Performance Monitoring System (HPMS).
- Optimized multi-year program for the Interstate and Non-Interstate NHS pavement construction and preservation programs.
- Generate list of municipal numbered highways in fair and poor condition for continued support of MassDOT's Municipal Pavement Program for State Numbered Routes.
- Renew contract for maintenance and software upgrades to the Pavement Management section's pavement management database.
- Improve the web-based pavement management database software to improve PMS predictive modeling and project selection tools and integrate tracking of Federal Reporting measures.

- Execute contract for annual maintenance and upgrades on the Pavement Friction Tester and Bumper Mounted Profilers.
- Complete calibration and certification on all equipment used for MassDOT ride quality project acceptance testing.
- Establish acceptable frictional characteristics that can be included in MassDOT's specifications for High Performance Asphalt Overlays (HPOL) using Dynamic Friction Tester
- Establish guidelines for texture readings to quantify segregation in new construction pavements.
- Assess long-term performance improvements of high application tack coats on limited access highways
- Asphalt binder specifications that incorporate two new binder parameters to address age induced surface distresses.
- Determine performance of High RAP surface mixtures for high volume roads on pilot projects.
- Propose mixture design procedure, performance test(s), and pilot specifications for cold central plant recycling (CCPR) and cold in-place recycling (CIR).
- Aging Protocol for a Balanced Mix Design that can be incorporated into MassDOT BMD.
- Review and analyze results from Superpave 5 pilot project on Route 5-Northampton and Whately
- Lab Trial Mixture Formula (LTMF) results for Waterproofing Preservation Surfaces (SSC-W) by conducting Flexural Beam Fatigue and Hamburg performance tests for approval.
- Lab Trial Mixture Formula (LTMF) results for High Performance (HP) mixtures by conducting Flexural Beam Fatigue and Hamburg performance tests for approval.
- GIS database to serve as a warehouse for incoming municipally-owned pavement condition data.
- Data model to create a standardized format to integrate municipal pavement condition data and roadway attributes into MassDOT's online database structure.
- Test version of ArcGIS Online-driven dashboard to allow municipalities and other stakeholders to interact with pavement data more effectively and make better informed decisions when prioritizing roadway improvement projects.
- Wide Area Network (WAN) infrastructure improvement for the Pavement Management Section

Estimated task completion: 09-30-2025

Estimated staff salaries and benefits: **$970,453.64**

Estimated Other Costs: **$137,000.00**

MassDOT staff members	% Time to task
Edmund Naras	100.0
Jonathan Smith	100.0

Cody Holemo	100.0
William Gutierrez	100.0
Stefan Kargakis	100.0
Liz Cruz-Falero	100.0
Subash Shahi	100.0
Steven Morin	100.0
James Pierce	100.0

Estimated task budget: $2,432,890.64

Estimated consultant costs: **$1,325,437.00**

Subtask / contract #	Total cost:	Pre-FFY 2025:	FFY 2025:	Post-FFY 2025:	Consultant/Contractor Name:	Consultant NTP:	Contract End Date:
Pavement management modeling, forecasting & optimized project selection for the Capital Investment Plan (CIP) / TBD	$130,000.00	$130,000.00	$90,000.00	$0.00	Deighton Associates Ltd	12-12-2024	09-30-2024
ISA: MassDOT Pavement Support Service (PS2) / 121943	$1,485,562.00	$538,665.00	$440,812.00	$392,104.00	UMass Dartmouth	04-01-2023	09-30-2026
Network Pavement Data Collection Services and Support / 123606	$4,794,675.00	$1,394,482.50	$794,625.00	$0.00	Pathway Services Inc	09-29-2023	None

Consultant notes: ISA UMass Dartmouth-$440,812 ($1,485,562 total over 4 years ISA) TBD Network Pavement Data Collection Services-$794,625 Deighton Assoc Ltd. Database Maint & Software Upgrades-$90,000 TOTAL: $1,325,437

- Skid Truck annual maintenance and software upgrades -$32,000
- Bumper Mounted Profilers annual maintenance and software upgrades -$55,000
- Pavement Preservation TSP2 membership -$20,000
- Miscellaneous mechanical & electronic supplies and training -$30,000
- TOTAL $137,000.00

Statewide Traffic Data Collection

B. 2 / Statewide Traffic Data Collection

Task Lead: John Amato

Task Purpose:

The MassDOT Highway Division's Statewide Traffic Data Collection (STDC) group is responsible for the development and maintenance of the Annual Traffic Data Collection Program. The program is designed in accordance with FHWA's Traffic Monitoring Guide (TMG), the AASHTO Guide for Statewide Traffic Data Collection Programs, and the Highway Performance Monitoring System (HPMS) guidelines. Traffic-derived travel data from the HPMS are used in the federal-aid highway fund apportionment formulae. Traffic data are critical to the analyses that support the Condition and Performance Reports to Congress, which are subsequently used for national highway budgeting purposes. HPMS-derived travel data are required to meet Clean Air Act requirements, and travel data are central to estimating several of MassDOT's performance indicators such as vehicle crash and fatality rates and delay. Therefore, a traffic counting program is conducted each year by the Statewide Traffic Data Collection group of the MassDOT Highway Division. The counting program is modeled after FHWA's Traffic Monitoring Guide, AASHTO's Guidelines for Traffic Data Programs and, most importantly, the HPMS Field Manual. The annual program involves the systematic collection of traffic data utilizing automatic traffic recorders located on various roadways throughout the State. In addition, the Statewide Traffic Data Collection group provides traffic data for MassDOT's pavement, highway, and bridge design efforts. This includes pavement rehabilitation, construction, maintenance, and construction staging and traffic management. Data gathered in support of the Department's program varies from single road tube automatic traffic recorder (ATR) counts to intersection turning movement counts (TMC) for traffic signal design and vehicle type classification for pavement design and environmental analyses (air quality and noise levels). Due to MassDOT's desire and interest to accommodate all road users and measure the performance of safety and mobility, continuing this year, there will be a focus on expanding the newly created pedestrian and bicyclist counter program and increasing the pedestrian and bicyclist counts available. In 2021, MassDOT purchased and installed twelve bicycle and pedestrian counters at eight locations across the state, including intersections, roadways, and shared-use trails. MassDOT will build upon the success of the bicycle and pedestrian pilot program initiated in the FFY21 SPR cycle and increase the bicycle and pedestrian count stations across the state. The goal is to standardize the collection of bicyclist and pedestrian count data; expand the scope of data collection to other parts of the state; and to continue to collect and populate our statewide traffic portal to create a more comprehensive network of counting sites. MassDOT will also work with Regional Planning Agencies (RPA) to upload their bicycle and pedestrian count data into the newly purchased Non-Motorized Database System. Likewise, MassDOT's desire to improve upon Weigh-In-Motion (WIM) data and technology to further assist the Commercial Vehicle Enforcement Section and improve safety is being evaluated. This technology should also assist with pavement management and bridge evaluations and design. We understand MassDOT needs to

improve upon commercial motor vehicle inspection and weight data and will work towards meeting the goal of obtaining WIM data and providing FHWA and the Federal Motor Carrier Safety Administration (FMCSA) with necessary information. The intention is to develop requirements and obtain assistance with vendor solicitations, proposal evaluations, deployment, testing and acceptance of a multi-purpose virtual weigh station pilot. The intent of a new WIM Program would be to identify the proper technology applications for additional WIM sensors in pavement.

Accomplishments in prior year:

The STDC program supported and monitored continuous count activities monthly, capturing class, volume, and speed data to support FHWA requirements. The maintenance of special counts was performed by request in which data is used by MassDOT staff on various levels (e.g., Design, Project, Pavement, Traffic Engineering, etc.) for planning and evaluation of highway conditions. All operational, continuous count sites (438 out of 584) were monitored monthly. Monthly volume, classification, & WIM data were uploaded to FHWA's web-based QC software, "Travel Monitoring Analysis System (TMAS) 2.8 for TVT, VMT and vehicle type reports.

- 47 special request studies were completed during FFY23 Q1, Q2 and Q3 which included 222 volume, 152 classification and 146 speed studies.
- 216 turning movement count (TMC) studies were completed.
- Additional continuous count sites were configured and are using telemetry for a total of 438 out of the 584 sites.
- Counted 391 out of 436 2022 Coverage Program count locations over the course of calendar year 2022. The overall combined total counted in FFY23 Q1, Q2 and Q3 is 268.
- Counted a total of 484 ramps in calendar year 2022. The overall combined total counted in FFY23 Q1, Q2 and Q3 is 363. There are a total of 459 locations in the Ramp Count Program per calendar year.
- Regional Planning Agencies (RPA) counted 201 of 216 assigned 2022 coverage program counts. In addition, they completed 449 additional (special) counts and 131 turning movement counts (TMC) in 2022.
- Ordered short-term, portable counters for bicycle and pedestrian counts.
- Installed new permanent bicycle and pedestrian counters
-
- Submitted short term coverage program counts.
- Submitted continuous count station data.
- Submitted the updated FAADT per MS2 average daily traffic (ADT) calculations.
- Submitted updated 2022 percentage peak single units (SU) and combination units (CU) data for all samples per MS2 calculations.
- Submitted corrected K factor data for those samples where they are less than 4.5 and improved the K factors reported for future years and reviewed with MS2.

- Submitted data for all ramps for 2022 and completed 2022 ramp data submittal.
- Submitted travel summary table, including rural interstates in the SU and CU.
- Bicycle and Pedestrian Count Program:
- In Q3 and the start of Q4, MassDOT began installations for this year's permanent count stations, with four new locations including a new facility type with a pedestrian railroad underpass in Springfield. This expansion will be focused on counting in key locations around Boston, expanding to areas of the state without any counters in the network, counting in areas with projected bicycle infrastructure expansion, and building out groups of similar locations for seasonal comparison. MassDOT has begun initial pilot deployments of short-term portable counters. In collaboration with the Massachusetts Department of Conservation and Recreation, MassDOT deployed three counters on the Southwest Corridor Park, a major urban shared-use path in Boston. In Q3, MassDOT began training Traffic Data Collection field staff to install these counters for the purposes of future projects. In addition to counter installations, in Q3 MassDOT began discussions with regional planning agencies to utilize the state's MS2 public database to host short-term counts from these agencies. Many RPAs conduct regular micro mobility counts but do not have the resources to make these counts publicly available. In turn, the larger and more regionally varied data these counts can provide will help to calibrate and examine seasonal use patterns for counters already in MassDOT's network.

Proposed activities for next year:

The focus of the STDC department is to continue telemetry upgrades to eligible, continuous permanent count stations, in which daily data studies of class, volume, and speed will be uploaded and processed through MS2, the application used to process all traffic studies by month. This approach will significantly reduce the delay in delivering the data to TMAS and the annual HPMS reports. Staff will include proper class portable counts on all functionally classified roadways including rural interstate roadways, which is a requirement of FHWA. In supporting HPMS requirements:

- Submit the 2023 FAADT data.
- Submit the 2023 percentage peak SU and CU data for all samples.
- Submit data for collected ramp counts for 2023.
- Vehicle miles traveled (VMT) weight HPMS summary data for future year's submittal.
- Class factor portable class counts to properly annualize them.
- Class factor from year to year for any non-current year data so the HPMS data for SU and CU.
- AADT is properly part of the current year with each year's submittal.
- Run all data through MS2 and quality control it before sending the data into TMAS.
- Begin conducting short-term bicycle and pedestrian counts to support statewide planning needs.
- Expand permanent bicycle and pedestrian counter network with 6-8 new permanent count stations.

- Continue development of the statewide FREEVAL model.
- Conduct technology assessment and develop formal plan for expanding WIM stations for each functional class of roadway as recommended in DAT Review and include enforcement capabilities to support MSP truck team activities.

Anticipated products:

- Clustering Analysis - Seasonal, axle and growth factor grouping.
- Short Count Assignment - Factor group assignment for all short count stations.
- HPMS Traffic Data Reporting: a. HPMS Segment Traffic Table b. HPMS Ramp Count Table c. HPMS Traffic Meta Data d. HPMS State Summary - Vehicle Type Table.
- Travel Time Database System (TTDS) a. 2023 Travel Time Metric HPMS Reports.
- FREEVAL interim model results.
- Bicycle and Pedestrian count program accuracy assessments.
- Bicycle and Pedestrian count program permanent counter expansion
- Bicycle and Pedestrian count program short-term counts
- WIM technology assessment report with expansion capabilities.
- Continue development of Statewide TDC Strategic Plan Report.

Estimated task completion: 09-30-2025

Timeline for new consultant support: TrafInfo Consultant Contract

Consultant name: TrafInfo
Scope development and FHWA review/approval: No Date

Total duration of task: 36 months

Timeline for new consultant support: Development of Statewide FREEVAL model

Consultant name: Kittleson & Associates
Scope development and FHWA review/approval: No Date

Total duration of task: 48 months

Estimated staff salaries and benefits: **$1,359,996.64**

Estimated Other Costs: **$1,245,000.00**

MassDOT staff members	% Time to task
John Amato	100.0

Brian Farrington	100.0
Michael Ribeiro	100.0
Misrak Sultan	100.0
Lori Suss	100.0
Ian Adams	100.0
Tracy DeYoung	100.0
James Groomes	100.0
Hector Monet	100.0
Wayne Schofield Jr.	100.0
Steve Robbins	100.0
Juan Nunez	100.0
Daniel Moy	100.0
Zachary Medeiros	50.0
Spencer Cullen	50.0
Michelle Boucher	50.0
Corey O'Connor	20.0
Neil Boudreau	5.0
Amy Getchell	5.0
Robert Belcastro	0.0

Estimated task budget: $3,099,996.64

Estimated consultant costs: **$495,000.00**

Subtask / contract #	Total cost:	Pre-FFY 2025:	FFY 2025:	Post-FFY 2025:	Consultant/Contractor Name:	Consultant NTP:	Contract End Date:
TrafInfo Consultant Contract / 116428	$1,097,000.00	$560,000.00	$395,000.00	$142,000.00	TrafInfo	03-07-2022	03-06-2025
Development of Statewide FREEVAL model / 117018	$350,000.00	$250,000.00	$100,000.00	$0.00	Kittleson & Associates	05-11-2022	06-01-2026

Consultant notes: Existing TrafInfo Consultant Contract (Contract #116248) expires March 7, 2025. One-year extension from March 7, 2025-September 30, 2025 estimated at $150,000 for FFY25. Midwestren Software Solutions (MS2) Traffic Count Database, Portal and support $450,000. Miovision (PDI) Turning Movement Count (TMC) data collection and processing $196,000. Total consultant Costs = $796,000.

- Midwestern Software Solutions (MS2) Traffic Count Database/Portal - Annual Vendor Support: --$450,000
- Miovision (through PDI) Turning Movement Counts Support Services - Annual Vendor Support Services (Billed Quarterly): --$196,000
- State Police Details to support counter installations: --State Police details needed for traffic control and safety ($120,000).
- Miscellaneous Equipment/Spare Parts:
- Road tube clamps ($10,000).

- Road Tube ($100,000).
- Road Tube Tape ($10,000).
- Miscellaneous supplies from Home Depot ($5,000).
- Miscellaneous supplies from Grainger ($5,000).
- Automatic Traffic Recorders (ATRs) upgrades/replacement ($200,000).
- Verizon Wireless service for HERE Sensors, Co-located Stations and Telemetry Stations ($150,000).
- Solar Panels 60 Watt, 12V ($20,000).
- 15 AMP MPPT Charge Controller Prewired Assembly with Surge Option ($25,000).
- Batteries for Telemetry Stations (Boston Battery) ($15,000).
- Posts for solar panels (RoadSafe Traffic Systems) ($5000).
- National Grid ($10,000).
- Comcast ($10,000).
- Modems and Antennas ($100,000)
- Hilti Automatic Powder-Actuated Fastening Nail Gun Package, supply of shot and nails ($30,000)
- New Equipment Purchases to support continuous data needs:
- Proposed purchase of TIRTL Light Based Non-Invasive Sensor for counting, vehicle classification and speed ($15,000 ea.) ($60,000 total).
- New Bike/Ped/Micromobility program:
- Data storage, batteries and subscription fees: $16,000
- New permanent and portable counters : $45,000
- Training and Conference Travel Budget for ongoing education for TMG requirements, AASHTO best practices, peer to peer knowledge transfer for staff: Conference Travel and Training ($20,000).
- Training and Conference Travel Budget for regional meetings in NH or other NE States, peer to peer knowledge transfer for staff: Conference Travel and Training ($20,000).

Survey

B.3 / CORS Network Operation and Expansion

Task Lead: John Anthony

Task Purpose:

Work under this task will involve managing the Continuously Operating Reference Station (CORS) Network and accompanying website as well as supporting MassDOT departments, other state agencies, municipalities, planners, GIS users, and the architectural and engineering community on the use of the CORS Network. The Survey Section endeavors to expand the MaCORS Network by identifying suitable locations for the construction of additional CORS stations to expand and enhance the network.

Accomplishments in prior year:

- As of August 2024 we have registered approximately 630 new subscribers for FFY2024.
- The Survey Section completed CORS upgrades to replace the existing 8' Masts at three CORS with prefabricated 16' Antenna Masts.
- In Q3 of FFY2024, the Martha's Vineyard CORS was accepted by the National Geodetic Survey (NGS) for inclusion in the NOAA CORS Network (NCN). The MaCORS network now has 71% of its CORS contributing to the National Spatial Reference System (NSRS).
- In Q4 of FFY2024 a full network adjustment was made to all stations.

Proposed activities for next year:

Continue to register new subscribers to the CORS Network and perform equipment updates as may be necessary.

Anticipated products:

- The CORS network will receive all pertinent upgrades for the next three years.

Estimated task completion: 09-30-2025

Estimated staff salaries and benefits: **$149,662.64**

Estimated Other Costs: **$35,000.00**

MassDOT staff members	% Time to task
Evanson Browne	60.0
John Anthony	15.0
John Barnes	15.0
Jeffrey Bruce	10.0
Mehdi Sadjady	10.0

Estimated task budget: $184,662.64

Other cost notes: Cable/Internet bills

B.4 / Development and Training

Task Lead: John Anthony

Task Purpose:

To participate in national, regional, and statewide boards and conferences that promote continued professional development and training relative to GPS and the use of MassDOT's CORS Network. Attendance at these meetings will promote and help develop the statewide geodetic control network for statewide spatial data.

Accomplishments in prior year:

The MassDOT Survey section did not attend any conferences or seminars relating to geospatial or location functions that required SPR funding.

Proposed activities for next year:

Seek out and attend conferences and seminars relative to geospatial and location technologies that would be beneficial to MassDOT staff.

Anticipated products:

N/A

Estimated task completion: 09-30-2025

Estimated Other Costs: **$5,000.00**

Estimated task budget: $5,000.00

Other cost notes: Other costs include travel expenses to attend development and training events

B.5 / Geodetic Surveys for Statewide Project Control

Task Lead: John Anthony

Task Purpose:

The MassDOT Survey Section maintains a statewide network of permanent geodetic control markers that provide public and private surveyors access to the NAD 83/NAVD 88 horizontal and vertical geodetic survey control datums. The Survey Section utilizes these markers, in conjunction with the MassDOT CORS Network, to establish semi-permanent survey control stations on MassDOT bridge and roadway projects throughout the Commonwealth. NAD 83 and NAVD 88 are common and widely recognized geodetic datums. Their use for project control is essential to maintain consistency throughout the various phases of project planning, design, and construction. The network is also used by MassDOT's Office of Transportation Planning, MassGIS, private surveyors, and numerous municipal and state agencies for various engineering, surveying, and GIS applications.

Accomplishments in prior year:

- Performed GPS observations and electronic bar-code leveling to establish NAD 83 and NAVD 88 project survey control for seventy-seven (77) bridge rehabilitation/reconstruction and highway reconstruction/improvement projects.
- Performed fifteen (15) GNSS observations as part of the National Geodetic Survey's (NGS) GPS on Priority NGS Benchmarks program. The results from thirteen (13) were published by NGS.

Proposed activities for next year:

- Continue ongoing surveys to maintain and densify the statewide network of horizontal and vertical control stations.
- Continue to set project controls for various bridge rehabilitation/reconstruction, highway reconstruction/improvement, and photogrammetric mapping projects.
- Coordinate survey efforts and work with NGS as we prepare for the future adoption of new horizontal and vertical survey datums.

Anticipated products:

- Updated control point database and data card file enabling the MassDOT survey control point website to publish newly established controls to the public.
- Individual control reports for each MassDOT project to be distributed to end users.

Estimated task completion: 09-30-2025

Estimated staff salaries and benefits: **$494,485.34**

MassDOT staff members	% Time to task
Arben Zhuri	50.0
Brian Knowles	50.0
Leo Scanlon	50.0
Eugene Tivnan	50.0
Evanson Browne	30.0
Jeffrey Bruce	30.0
Michael Roberts	30.0
Mehdi Sadjady	30.0
John Anthony	25.0
John Barnes	25.0
Michael Chouinard	20.0

Estimated task budget: $494,485.34

B.6 / GPS and Conventional Survey Equipment

Task Lead: John Anthony

Task Purpose:

To upgrade, maintain, and service MassDOT's GPS and conventional survey equipment to ensure accurate data collection and efficient data transmission to users.

Accomplishments in prior year:

Procured survey field supplies and mark setting equipment; extensions to the service/maintenance plans on our data collection and GNSS processing software; and repairs to GNSS receivers.

Proposed activities for next year:

Procure new contract(s) with vendor(s) that will allow the Survey Section to purchase field equipment and supplies, and to repair/service equipment as necessary.

Anticipated products:

Six (6) new multi-constellation GNSS receivers capable of receiving signals from the 4 major constellations (GPS, GLONASS, Galileo & BeiDou). Incidental survey supplies such as batteries, cables, prisms, nails, markers, and other survey and CORS Network equipment as needed.

Estimated task completion: 09-30-2025

Estimated Other Costs: **$250,000.00**

Estimated task budget: $250,000.00

Other cost notes: This is an allocated amount for the purchase of field equipment (GPS receivers, tripod legs, batteries, cables, prisms, etc.); supplies (stakes, nails, markers, paint, etc.); and equipment repairs/services as needed.

Traffic Crash Records and Safety Management

B.7 / Improved Crash Data and Safety on Massachusetts Roadways

Task Lead: Bonnie Polin

Task Purpose:

This work consists of improving data collection and dissemination through working with police, the Registry of Motor Vehicles (RMV), MassDOT's Office of Transportation Planning, and others to improve distribution efforts. MassDOT will work with consultants and MassDOT Information Technology (IT) to upgrade and improve data dissemination and assist with the development of an updated crash system so that an enhanced data-driven approach to safety can be utilized. Data-driven safety analysis will be required to reach the goal areas related to zero deaths and serious injuries. The data will then be used to develop and enhance a Safety Management System where effective and efficient programs and projects are identified, programmed and implemented. We then apply highway safety methodologies to define and refine projects and programs to reduce fatalities and serious injuries. This will all be identified through the Strategic Highway Safety Plan (SHSP) and the Highway Safety Improvement Program.

Accomplishments in prior year:

- Working on developing enhancement ideas to improve IMPACT (had meetings and discussions). During the full FFY2024 year, it is estimated, based on the first 10 months, we will have had a total of 19,600 users and 38,300 page views in IMPACT. We also had to update text in IMPACT to simplify to a 4th grade level, where possible, to make it more accessible.
- Continue geocoding crashes – During the full FFY2024 year, it is estimated, based on the first 10 months, that we will have geocoded 146,500 crashes including 131,000 automatically geocoded and 15,500 manually geocoded.
- Continue providing data quality information to the RMV, including monthly rejection reports, police agency reporting levels, etc., We have been working closely with RMV on the Vulnerable Road User report and information to ensure quality.
- Completed the collection of the intersection data collection for Model Inventory of Roadway Elements (MIRE) Fundamental Data Elements (FDE) and still working on integrating into R&H road file. The consultant working on this left VHB and is now an employee of ESRI so this should help!
- The updated risk and crash based models and network screening models have been completed and now just working to have them posted into IMPACT. Also working on an improved process to view combined risks and crash models so that communities can be prioritized which will also be available close to the end of the year.
- Continue participating in meetings and activities of the Traffic Records Coordinating Committee (TRCC), Executive TRCC and subcommittees.

- Continue developing SPFs so that HSM methodologies can be utilized. (The design level SPF for ramp terminals rural segments and urban segments are all in process and will be completed around the end of the Federal fiscal year. We just began developing MA-specific CMFs which will be completed in 2025.
- During the full FFY2024 year, it is estimated, based on the first 10 months, MassDOT will have conducted 42 road safety audits (RSAs) this year throughout the Commonwealth to identify issues and propose recommendations so that data driven safety improvements can be made.
- The updated HSIP Guidelines were started and will be completed in FFY2025.
- Developed several systemic type projects where MassDOT procured materials and provided to the locals.

During this year, we were hoping to advertise a multiple locations project to enhance pedestrian crossings near bus stops but this may be moved to early 2025. Also, addressing pedestrian safety at municipally-owned signalized intersections is a project that began this year.

- The Action Plan of the Strategic Highway Safety Plan based on a Safe System approach will be posted before the end of the year.
- Developed the 2025 HSIP program to include infrastructure projects and non-infrastructure projects and focus on systemic approaches as well as VRU projects based on the results of the HSIP Implementation Plan.
- Corrected the spatial information for some of the speed regulations and work towards completing the full regulations so data can be posted for public consumption.
- Continuing to assist with Safe Street and Roads For All Grants as needed.

We assisted Brocktonand also worked with them on a marketing piece for Brockton to increase seat belt usage.

The big kick off event was this quarter and now there are evaluations of effectiveness this coming quarter.

- Continue to assist with raising awareness of safety messaging.

During the full FFY2024 year, it is estimated, based on the first 10 months, we will have had a total of 424,400 impressions with 8,200 engagements, the engagement rate is 1.92% (Twitter average engagement rate is 0.5%)..

- Assist with Every Day Counts (EDC) Nighttime Visibility to Improve Pedestrian Safety Initiative and other EDC initiatives. As part of the Nighttime Visibility to Improve Pedestrian Safety, we are including RRFBs with street lights at some locations on our systemic pedestrian crossing at bus stops project.
- Continue working with Safe System Intersection analyses and other Safe System methods to quantify safety.

- Working with RMV on evaluating the vulnerable road user fields in the crash system.

Due to issues with vulnerable user type, we are considering research to understand what others have done.

Proposed activities for next year:

- Additional trainings on IMPACT and begin collecting feedback on additional needs to further enhance the MA Safety Management System.
- Continue geocoding crashes and bringing them up to real time geocoding so that we can follow up with the police who prepared the crash report. This should also help to improve data quality.
- Continue providing data quality information to the RMV, including monthly rejection reports, police agency reporting levels, etc., in an effort to improve the data quality of the crash system. Finalize input on RMV's Request for Quotes (RFQ) for a new Crash Data System so that a new contractor is procured.
- Complete the integration of the intersection data collection for Model Inventory of Roadway Elements (MIRE) Fundamental Data Elements (FDE) into the Road File.
- Update the Top Crash Clusters.
- Continue participating in meetings and activities of the Traffic Records Coordinating Committee (TRCC), Executive TRCC and subcommittees.
- Continue developing SPFs and CMFs so that HSM methodologies can be utilized.
- Conduct road safety audits (RSAs) throughout the Commonwealth to identify issues and propose recommendations so that data driven safety improvements can be made, whether in person or remote. We anticipate conducting over 60 RSAs.
- Put in place and publicize guidance on HSIP eligibility.
- Develop several systemic type projects where MassDOT procures materials and provides to the locals.
- Roll out the 2026 HSIP program to include infrastructure projects and non-infrastructure projects and focus on systemic approaches (like the EDC initiatives for FoRRRwD and Nighttime Visibility for Pedestrian Safety) based on the results of the soon-to-be-completed HSIP Implementation Plan.
- Assist with Safe Street and Roads For All Grants and other grants from IIJA / BIL and Local Road Safety Action Plans.
- Complete the spatial layer of the Speed Regulations.
- With consultant support, build a public facing speed regulations collection and visualization tool.
- Prepare the HSIP annual report.
- Continue to assist with raising awareness of safety messaging.
- Continue working with Safe System Intersection analyses and other Safe System methods to quantify safety.

- Work with RMV to further improve the data quality of the VRU information.

Anticipated products:

- Listing/plan to further enhance IMPACT Data quality reports for the RMV.
- Speed Regulation Collection and Visualization Tool
- Additional MA-specific SPFs and CMFs
- Completed Road Safety Audits.
- Update guidance on HSIP eligibility.
- Completed annual HSIP report.

Estimated task completion: 09-30-2025

Estimated staff salaries and benefits: **$1,499,287.33**

MassDOT staff members	% Time to task
Darryl Valovcin	90.0
TPP II TBH	90.0
Robert Moon	90.0
Dakota DelSignore	88.0
Michelle Deng	88.0
Ana Fill	88.0
Kevin Fitzgerald	88.0
Jennifer Inzana	88.0
Kirsten Johnson	88.0
Bonnie Polin	88.0
Stacey Schwartz	88.0
James Terlizzi	88.0
Kylie Braunius	88.0
Evelyn Densmore	88.0
Shaojie Qiu	88.0
Civil Engineer III TBH	88.0
Civil Engineer I TBH	88.0
intern 2 co-op 2	85.0
Intern-1 co-op-1	85.0
intern 3 co-op 3	85.0

Estimated task budget: $1,879,287.33

Estimated consultant costs: **$380,000.00**

Subtask / contract #	Total cost:	Pre-FFY 2025:	FFY 2025:	Post-FFY 2025:	Consultant/Contractor Name:	Consultant NTP:	Contract End Date:
SPF Ramp Termini / 119204	$276,600.00	$96,600.00	$180,000.00	$0.00	UMASS Lowell	09-01-2022	08-31-2025
Design Level MA-Specific SPR Development (Urban) / 121596	$250,000.00	$200,000.00	$50,000.00	$0.00	Jacobs Engineering	08-01-2023	02-01-2025
Urban Intersection Crash Prediction Models / TBD	$250,000.00	$0.00	$92,769.00	$157,231.00		11-01-2024	09-30-2027
Speed Regulations Visualization / TBD	$57,231.00	$0.00	$57,231.00	$0.00		11-01-2024	09-30-2025

Consultant notes: The budget for FFY25 for speed management should be $110,451 but due to budget constraint, we were only able to allocate $57,231 towards this research. We are trying to find other funding sources to get the remaining $53,220 in funds needed for this $110,451 project.

B.8 / Prevent and Minimize Risks to MassDOT Staff and Workers on the Roadways

Task Lead: Bonnie Polin

Task Purpose:

Work is required to manage known and preventable risks to MassDOT employees and those working on the roadways by setting, communicating, and following safety standards to achieve our goal of zero fatalities and injuries.

Accomplishments in prior year:

As of the date of this preparation (August 9th), work was actively taking place on the assessment (2 per each district). The bulk of the work will take place in August and early September. The reports will be completed by December 2025.

Proposed activities for next year:

- Continue to research and support work zone safety initiatives through participation in the Work Zone Technical Committee as part of the AASHTO Subcommittee on Traffic Engineering (SCOTE) and National Committee on Uniform Traffic Control Devices (NCUTCD).
- Continue involvement in the Strategic Highway Safety Plan (SHSP) emphasis area of Safety of Workers on the Roadways.
- Work with Highway Operations Center and FHWA on the Every Day Counts (EDC) crowdsourcing initiative. This will help with incident response and minimize exposure for workers on roadways.
- Continue work at the national level on work zone safety and integration of technology
- Perform work zone safety assessments (two per MassDOT district). This is anticipated to take place in the end of July, August, and September 2024. The reports will then be completed in Q1 of 2025.

Anticipated products:

12 Work Zone Safety Assessments. By end of FFY2025 the assessments will be completed; reports will be finalized during Q1 of FFY26.

Estimated task completion: 09-30-2025

Estimated staff salaries and benefits: **$56,698.44**

MassDOT staff members	% Time to task
Kevin Chiang	10.0

Christopher Falcos	10.0
Zachary Medeiros	5.0
Fangyun Xi Goncalves	5.0
Thao Tran	5.0
Emmanuel Gonzalez	5.0
Buu Tran	5.0
Noah Thompson	5.0
Everlyn Galloway	5.0

Estimated task budget: $56,698.44

B.9 / Training of MassDOT Staff to Keep Current and Cutting Edge

Task Lead: Bonnie Polin

Task Purpose:

This task includes training for MassDOT Traffic and Safety staff with the intention of keeping up with the latest practices in highway safety to effectively reduce fatalities and injuries on Massachusetts' roadways.

Accomplishments in prior year:

- Attended the Transportation Research Board (TRB) Annual Meeting, FHWA Peer Exchanges, and the AASHTO Committee on Safety and other AASHTO related meetings.
- Served as panel members for National Cooperative Highway Research Program (NCHRP) studies.
- Trained other staff members on HSM methodologies and data driven safety analyses and other trainings to further the efforts to reduce fatalities and injuries.

Proposed activities for next year:

- Attend the TRB Annual Meeting, FHWA Peer Exchanges, and the AASHTO Committee on Safety, NCUTCD, and other meetings.
- Participate in NCHRP panels on safety research.
- Attend webinars on best practices and latest findings of enhancing and incorporating safety.
- MassDOT staff will avail themselves of training (May be virtual or in person).

Anticipated products:

Better trained employees who can push new methodologies to reduce fatalities and injuries.

Estimated task completion: 09-30-2025

Estimated staff salaries and benefits: **$74,545.23**

Estimated Other Costs: **$28,000.00**

MassDOT staff members	% Time to task
Dakota DelSignore	4.0
Michelle Deng	4.0
Ana Fill	4.0
Kevin Fitzgerald	4.0
Jennifer Inzana	4.0
Kirsten Johnson	4.0
Bonnie Polin	4.0

Stacey Schwartz	4.0
Neil Boudreau	4.0
Amitai Lipton	4.0
James Terlizzi	4.0
James Danila	4.0
Kylie Braunius	4.0
Evelyn Densmore	4.0
Shaojie Qiu	4.0
Robert Moon	4.0

Estimated task budget: $102,545.23

Other cost notes:

Travel costs (airfare, mileage, hotel, registrations, per diems, etc.) to attend conferences, meetings, etc. by staff so that they can be trained. MassDOT leadership signaled this will be encouraged and more conferences, meetings and trainings will be approved.

Travel costs (airfare, mileage, hotel, registrations, per diems, etc.) to attend conferences, meetings, etc. by staff so that they can be trained.

SPR II Financial Table

Totals

	Staff cost	Consultant cost	Other cost	Total cost
SPR I A	$5,148,265.20	$3,453,173.00	$264,000.00	$8,865,438.20
SPR I B	$4,605,129.26	$2,200,437.00	$1,700,000.00	$8,505,566.26
SPR I (A+B) total	$9,753,394.46	$5,653,610.00	$1,964,000.00	$17,371,004.46

The SPR will be monitored throughout the year to determine if an amendment to the STIP is necessary to ensure adequate funding. The SPR II is 29% of the overall program, meeting the 25% minimum threshold.

2024
State Planning and Research Program II

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Office of Transportation Planning

David Mohler, Executive Director	**Steve Woelfel**, Deputy Executive Director	**Bob Frey**, Director of Project-Oriented Planning	**Ethan Britland**, Manager of Multimodal Planning	Peter Sutton
				Makaela Niles
				Patrick Snyder
				Rachel Kelly
			Lionel Lucien, Manager of Public Private Development	William Simon
				TPP III (to be filled)
		Kevin Lopes, Director of Geospatial Technology		David Dinocco
				Janine Hynds
				Michael McGill
				Jose Simo
				Argenis Sosa
				Timothy Morrissey
				Sudip Paudel
				Lin Han
				Shruti Venkatesh
				Patrick McCafferty
				Florence Person
				Carl Hughes
				Charlotte Mays
				David Henriques
				Nikhitha Yelukati
				Charles Major
		Derek Krevat, Manager of MPO Activities		Derek Shooster
				Christopher Klem
				Miranda Briseno
				Raissah A. Kouame
		Jules Williams, Manager of Sustainable Transportation		Max Natanagara
				Daisy Brown
		Hao Yin, Manager of Research		Nicholas Zavolas
				Patrick McMahon
				Michael Flanary
				Anil Gurcan
				Austin Sanders
		Jonathan Church, Manager of Transit Planning		Patricia Cahill
				Arnav Chatterjee
				Caleb Plummer
				TPP III (to be filled)
		Liz Williams, Director of Data and Policy		Marthinus J. "MJ" Riekert
				TPP II (to be filled)
		Michelle Scott, Manager of Capital Planning		Andrew Wang
				Stephanie Abundo
		Nathaniel Kerr, Manager of Administration		TPP II (to be filled)
				TPP II (to be filled)
		Susan Reppucci		

Research

A. Program Development, Administration, and Implementation

Task Lead: Hao Yin

Task Purpose:

To provide oversight and administration of the research program, conduct internal and external outreach activities, and manage associated contracts. The Research Section's work includes conducting research problem statement (RPS) solicitations; organizing RPS evaluation and selection; procuring and administering research contracts; and tracking project performance and implementation efforts and impacts.

Accomplishments in prior year:

- Engaged in scoping and contracting coordination efforts between research project principal investigators (PI) and project champions (PC).
- Procured and/or administered all SPRII-funded research agreements (and/or contracts) with research entities.
- Performed project development and management for all SPRII-funded research projects.
- Coordinated the review and prioritization of statements for new FFY25 projects.
- Coordinated initial scope discussion and PI identification approach with agency technical leads for the FFY25 research projects.
- Produced FFY23 Research & Tech Transfer Annual Report.
- Produced four MassDOT Research Quarterly Newsletters.
- Updated MassDOT research website with new contents regularly.
- Conducted web-based project completion survey with project champions, principal investigators and project managers for thirteen projects completed in 2023 to collect feedback and information on how the research process can be improved and research results have been/are to be utilized and implemented.
- Prepared quarterly reports on the status of research and training programs.

Proposed activities for next year:

- Continue oversight of research contracts and agreements.
- Continue research project management.
- Prepare quarterly reports on the status of research and training programs.
- Update MassDOT Research Section website regularly.
- Produce FFY24 Research & Tech Transfer Annual Report.
- Delivery of other research services as requested by the MassDOT Research Section.
- Produce MassDOT Research Quarterly Newsletters.
- Continue tracking research project performance, implementation and impacts.

Anticipated products:

- Executed ISAs and contracts.
- Quarterly reports.
- Regular updating of the Research & Technology Transfer website.
- FFY24 Research & Tech Transfer Annual Report.
- Research Quarterly Newsletters.

Estimated task completion: 09-30-2025

Estimated staff salaries and benefits: **$123,436.91**

Estimated task budget: $123,436.91

MassDOT staff members	% Time to task
Michael Flanary	20.0
Patrick McMahon	20.0
Nicholas Zavolas	20.0
Anil Gurcan	20.0
Austin Sanders	20.0
Hao Yin	20.0
Staff Inflator FFY25	None

Other costs:

B. Research

Task Lead: Hao Yin

Task Purpose:

Subtasks:

MCRP

In addition to the following items, coordinates and oversees the emerging agency needs across the Department.

- Perform literature searches and reviews
- Conduct 2025 research problem statement solicitation
- Update Transportation Research International Documentation (TRID), National Transportation Library and other national transportation research record repositories
- Maintain and expand MassDOT research network
- Schedule and host MassDOT transportation research and innovation webinar series

On-going Projects

To perform the research contained within this task, MassDOT contracts directly with universities, research institutes and/or private companies. There may be occasions when a project actual duration doesn't align with the anticipated duration due to challenges arising during research investigation and beyond the project team's control. Under such circumstances, additional time may be granted pending FHWA's approval, and the project shall remain within the original category for fiscal tracking purpose. The Research Section conducts annual research problem statement (RPS) solicitations to collect research needs from agency staff. The submitted problem statements are then prioritized based on MassDOT Division/Shared-Service Office Senior Leaders' rankings, MassDOT overall priorities, and research funding eligibility and availability. The Research Section assists MassDOT project champions with literature searches; the drafting of scopes of work; identification and selection of principal investigators, and the administration of project agreements/contracts, deliverables, final report reviews and publication, and coordination with FHWA.

Accomplishments in prior year:

1. Completed "Implementing the AASHTO Mechanistic-Empirical Pavement Design Guide Phase III" project.

2. Completed "Methods to Identify Problematic Carriers and Prevent Infrastructure Damage" project.

3. Completed "Feasibility Study of 3D Printing Applications for Bridge Elements in MA" project.

4. Completed "Data-Driven Approach for Transit Capital Planning" project.

5. Completed "Using Traffic Signals to Limit Speeding Opportunities on Arterial Roads" project.

6. Completed "Using Grip Sensors to Control a Salt Spreader Application Rate" project.

7. Completed "Smart work zone control and performance evaluation based on trajectory data" project.

8. Completed "Effectiveness of Two-stage Turn Queue Boxes in Massachusetts: A Comparison with Bike Boxes" project.

9. Completed "Energy-Focused Decision-making Framework for MBTA Operations and Planning" project.

10. Completed "Accessible Bus Stop Design in the Presence of Bike Lanes" project.

11. Completed "Cross-Modal Impact Assessment for Sustainable Transportation Networks " project.

12. Completed "LIMMS Gap Analysis and Development Plan" project.

13. Completed "Complete Streets v.2: Respecting the Roots" project.

14. Completed "Development of Improved Inspection Techniques using LiDAR for Deteriorated Steel Beam Ends" project.

Proposed activities for next year:

On-going research projects:

To perform the research contained within this task, MassDOT contracts with universities, research institutes and/or private companies. There may be occasions when a project actual duration doesn't align with the anticipated duration due to challenges arising during research investigation and beyond the project team's control. Under such circumstances, additional time may be granted pending FHWA's approval, and the project shall remain within the original category for fiscal tracking purpose.

In addition, MassDOT research personnel will provide the following services:

- Update Transportation Research International Documentation (TRID),
- National Transportation Library and other national transportation research record repositories
- Perform literature searches and reviews
  Maintain and expand MassDOT research network
- Schedule and host MassDOT transportation research and innovation webinar series

1. Complete "Measuring Fare Payment Compliance on MBTA Buses and Light Rails" project.

2. Complete "Post-Fire Damage Inspection of Concrete Structures Phase III Field Verification Phase" project.

3. Complete "Developing a Visualization, Sharing and Processing Platform for Large-Scale Highway Asset Point Cloud Data" Project. 4. Complete "Method for Pavement Marking Inventory and Retroreflectivity Condition Assessment Using Mobile Lidar" project.

5. Complete "3D-Printed Lattice-based Structures for Next Gen Bridge Bearings" project.

6. Complete "Measuring Accessibility to Improve Public Health Phase II" project.

7. Complete "Recycled Ground-Glass Pozzolan (RGGP) for Use in Cement Concrete" project.

8. Complete “Field Study to Determine Salt Usage Efficiency on Two Pavement Types” project.

9. Complete “Effects of Asphalt Binder Source in Asphalt Mixture Performance" project.

10. Complete “Evaluating Driver Education Modules on Safety" project.

Anticipated products:

- Interim deliverables and final reports for all on-going research projects.
- Initiate and manage new research projects.

Estimated task completion: 09-30-2025

Estimated staff salaries and benefits: **$270,491.50**

Estimated task budget: $2,314,231.50

MassDOT staff members	% Time to task
Michael Flanary	80.0
Patrick McMahon	75.0
Nicholas Zavolas	60.0
Anil Gurcan	55.0
Austin Sanders	55.0
Hao Yin	30.0
Staff Inflator FFY25	None

Estimated consultant costs: $2,043,740.00

Subtask / contract #	Total cost:	Pre-FFY 2025:	FFY 2025:	Post-FFY 2025:	Consultant/Contractor Name:	Consultant NTP:	Contract End Date:
MCRP / 109600	$0.00	$0.00	$598,798.00	$0.00	UMTC	None	None
On-going Research projects	$1,444,942.00		$1,444,942.00				

Consultant notes:, $598,798 is allocated to UMTC, Subtask SPRST-08-16-2024-342 MCRP.

C. Technology Transfer

Task Lead: Hao Yin

Task Purpose:

Baystate Roads is the longstanding program name for Massachusetts LTAP, and it serves as a conduit for information transfer on technologies, best practices, and methodologies for operating, maintaining, and managing municipal departments of public works and highway departments throughout the Commonwealth. The program also serves as an efficient communications network, by which MassDOT transfers policy information, engineering directives, program funding, and other updates to the 351 municipalities in Massachusetts. Please see Appendix C.1 for FFY25 LTAP Training Plan.

Subtasks:

LTAP

Baystate Roads is the longstanding program name for Massachusetts LTAP, and it serves as a conduit for information transfer on technologies, best practices, and methodologies for operating, maintaining, and managing municipal departments of public works and highway departments throughout the Commonwealth. The program also serves as an efficient communications network, by which MassDOT transfers policy information, engineering directives, program funding, and other updates to the 351 municipalities in Massachusetts. Please see Appendix C.1 for FFY25 LTAP Training Plan.

MTS

MassDOT Training Services (MTS) assist MassDOT in developing and implementing an annual plan to provide essential and high-quality technical training to MassDOT employees with a focus on the Highway Division. Through this component, MassDOT coordinates, directs, and oversees the UMTC training team as it provides training classes requested by MassDOT's Highway Division to its staff throughout the state. Please see Appendix C.2 for FFY25 MTS Training Plan.

Conferences

MassDOT convenes two transportation technology transfer conferences each year: a one-day Moving Together Conference in the fall and a two-day Transportation Innovation Conference in the spring.

Through the comprehensive MassDOT-UMass Amherst Interdepartmental Service Agreement (ISA #109600), UMTC provides services to MassDOT including conference program planning, coordinating with speakers and moderators, managing event registration and exhibitors, contracting with venue and event support services, managing conference logistics, and delivering the conferences.

Construction Management Certificate Program

Continue implementing the new 4-year partnership agreement with the Wentworth Institute of Technology (WIT).

Deliver the Construction Management Certification Program to 30 participants representing all Highway districts. The annual expense is set at $63,000, which covers the delivery of the 7-week curriculum.

Accomplishments in prior year:

Proposed activities for next year:

Anticipated products:

Estimated task completion: 09-30-2025

Estimated staff salaries and benefits: **$20,125.36**

Estimated task budget: $3,598,526.36

MassDOT staff members	% Time to task
Hao Yin	25.0
Anil Gurcan	10.0
Austin Sanders	10.0
Staff Inflator FFY25	None

Estimated consultant costs: $3,578,401.00

Subtask / contract #	Total cost:	Pre-FFY 2025:	FFY 2025:	Post-FFY 2025:	Consultant/Contractor Name:	Consultant NTP:	Contract End Date:
LTAP / 109600	$7,420,807.00	$5,412,846.45	$1,131,076.00	$876,884.55	UMTC	10-01-2022	09-30-2025
Conferences / 109600	$2,553,823.00	$1,687,098.00	$866,725.00	$0.00	UMTC	10-01-2022	09-30-2025
Construction Management Certificate Program / TBD	$189,000.00	$0.00	$63,000.00	$126,000.00	Wentworth	TBD	TBD
MTS/109600	$8,106,771.00	$5,707,988.28	$1,517,600.00	$881,182.72	UMTC	10-01-2022	09-30-2025

Consultant notes:

Other costs:

D. Regional and National Collaboration

Task Lead: Hao Yin

Task Purpose:

To coordinate MassDOT's participation in national and regional transportation research activities, including the research committees, research statement submission and reviews, project panels, technical working groups, and task forces; to disseminate MassDOT's research efforts, products, program management and delivery approaches both nationally and regionally; and to distribute research results and activities of the Transportation Research Board (TRB), American Association of State Highway and Transportation Officials (AASHTO) and other state DOTs within MassDOT.

Subtasks:

Peer Exchange

AASHTO TSP

Pooled Fund Studies

In FFY25, MassDOT intends to the following Transportation Pooled Fund studies.

5(422) National Cooperative Highway Research Program 5(447) Traffic Control Device (TCD) Consortium 5(455) National Accessibility Evaluation Phase II 5(465) Consortium for Asphalt Pavement Research and Implementation (CAPRI) 5(479) Clear Roads Phase III

5(481) In-Service Performance Evaluation (ISPE) of Roadside Safety Features 5(482) Development and Evaluation of Roadside Safety Systems for Motorcyclists 5(501) Roadside Safety Research for MASH Implementation Phase III

5(511) TRB Core Support Services 5(516) Highway Safety Manual 2nd Edition (HSM2) Implementation Phase III

Solicitation 1612* Designing Transportation Infrastructure for Electric Vehicles (TPF project number yet to be assigned)

Accomplishments in prior year:

- Coordinated with MassDOT Highway Divisions and Planning Office to establish participation in transportation pooled fund (TPF) projects funded through SPR II.
- Participated in and contributed to AASHTO RAC activities.
- Coordinated the TRB National Cooperative Highway Research Program (NCHRP) problem statement review process.
- Disseminated TRB research reports, technical webinars and NCHRP project panel member solicitations to appropriate MassDOT staff.
- Participated in and contributed to New England Transportation Consortium (NETC) program management and technical activities.
- Participated in and contributed to AASHTO's RAC Regional 1 activities including preparation activities for the RAC 2024 winter meeting.
- Applied for AASHTO RAC Committee High Value Research Projects Award and received Sweet-16 Award.
- Updated MassDOT research projects in the TRB Research-In-Progress database.
- Disseminated MassDOT research reports through the TRB E-Newsletter.

Proposed activities for next year:

- Coordinate within MassDOT to establish participation in pooled fund programs, and support AASHTO RAC activities, NCHRP research statement reviews, NCHRP technical panel participation, and TRB representative's visit.
- Participate in other State DOT’s Research Peer Exchanges when appropriate.
- Execute MassDOT Research Peer Exchange.

Anticipated products:

- Distribution of research products and information from TRB, TPF and other state DOTs.
- Communication of MassDOT research reports through TRB E-Newsletter.
- Participation in AASHTO RAC activities.
- Delivery of MassDOT Research Peer Exchange.
- Identification of MassDOT's position on problem statements for the annual NCHRP project cycle.

Estimated task completion: 09-30-2025

Estimated staff salaries and benefits: **$152,928.03**

Estimated Other costs: $300,000.00

Estimated task budget: $1,093,655.03

MassDOT staff members	% Time to task
Hao Yin	25.0
Nicholas Zavolas	20.0
Anil Gurcan	15.0
Austin Sanders	15.0
Patrick McMahon	5.0
Staff Inflator FFY25	None

Estimated consultant costs: $640,727.00

Subtask / contract #	Total cost:	Pre-FFY 2025:	FFY 2025:	Post-FFY 2025:	Consultant/Contractor Name:	Consultant NTP:	Contract End Date:
Peer Exchange / 126725	$0.00	$0.00	$140,727.00	$0.00	VOLPE	None	None
AASHTO TSP / TBD	$0.00	$0.00	$500,000.00	$0.00		None	None

Consultant notes:

Other cost notes: Memberships/subscriptions, training and travel

SPR II Financial Table

Totals

	Staff cost	Consultant cost	Other cost	Total cost
SPR I (A+B) total	$9,753,394.46	$5,653,610.00	$1,964,000.00	$17,371,004.46
SPR II	$566,981.81	$6,562,868.00	$300,000.00	$7,129,849.81
SPR I & II total	$10,320,376.27	$12,216,478.00	$2,264,000.00	$24,500,854.27

The SPR will be monitored throughout the year to determine if an amendment to the STIP is necessary to ensure adequate funding. The SPR II is 29% of the overall program, meeting the 25% minimum threshold.